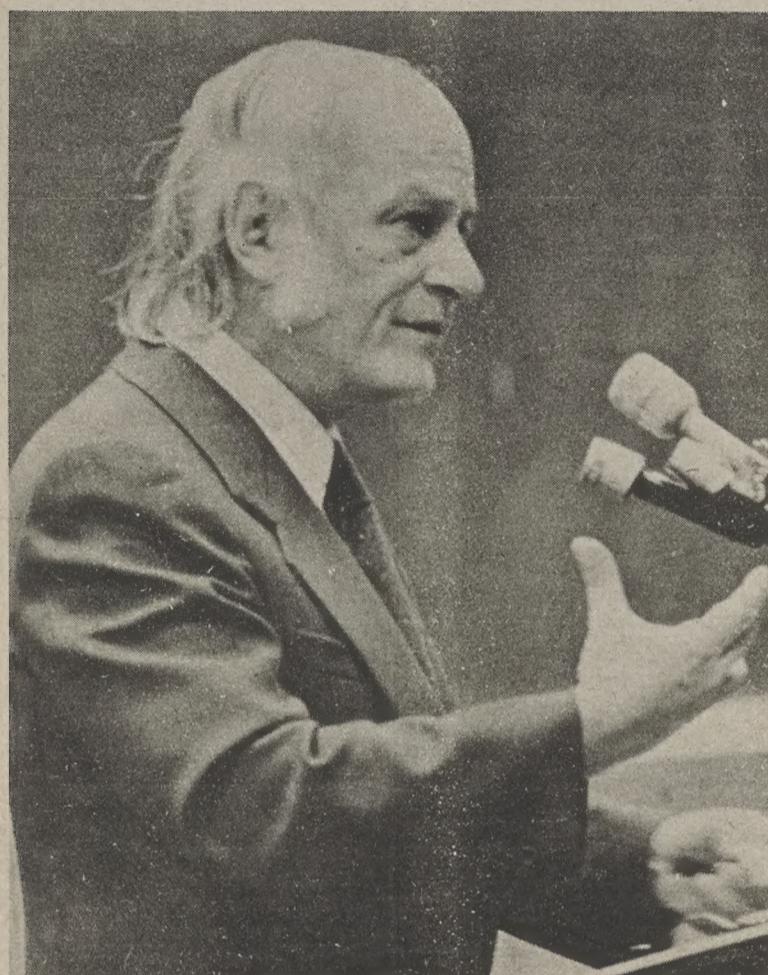


Ain't nobody meanah,
ain't nobody cleanah...

The Gateway

VOL. LXV, NO. 44. THE UNIVERSITY OF ALBERTA, EDMONTON, CANADA.

THURSDAY, MARCH 6, 1975. EIGHT PAGES.



René Levesque.

photo by Greg Neiman

Levesque support grows

by Greg Neiman

The Bourassa government in Quebec, now implicated as party to "Harbourgate", may topple before the separatists in the next election, although it enjoys a great majority in its legislature at present.

Rene Levesque, leader of the Partie Québécois, says popular support for him and his party has grown rapidly in past years.

"The present government is breaking up," he said at a public lecture Tuesday night, "this government happens to be the last rampart not just for the Liberal Party, but for the federal system in Quebec. The only thing facing the government is us, and now we're growing like mad."

"It's possible that maybe next time, if we don't win, we will be very close."

Should the Partie Québécois gain a majority in the next election, Levesque says his party would try to establish a strong provincial government first, and move towards an official separation of Quebec from the rest of Canada by a referendum.

If the majority of people

vote against separation from confederation, Quebec will stay in, he said, and his administration would continue as the provincial government.

This precludes, though, that such a referendum should fail.

"Do you know of any place in the world," asked Levesque, where, in a modern society, 80% of the population is run by a 20% minority group that holds 80% of the middle and high management decision-making positions?"

This situation which exists in Quebec, Levesque sees as clearly oppressive.

"We are still officially a colony."

The majority of people, he said, are now incapable of tolerating the situation, and are willing to support him in a move to at least provide democratic equality with English Quebec.

"The richest per capita group in Canada is the English speaking minority, and this is very typical of colony situations."

As well, the more clearly this dichotomy is presented, the more clearly the majority of people wish to see it rectified, as evidenced by Levesque's

Continued on p. 4.

Faculty Council row over athletics control

Regina (CUP) A battle is brewing over the priorities and control of the athletic program on the University of Regina campus.

The opening shot was a proposal to disband the athletic council in favour of a program run entirely by the Physical Education faculty. In response, Student Union President Jim

Gray plans a survey to determine students' priorities and interests.

The Student Union and the Physical Education Department run the present athletics program jointly. But in the working paper presented to the student council and the university's Vice-President on Feb. 18, 1975, Physical Education Neil Sherlock recommended a Phys. Ed. Department Council to control both intramural and intervarsity sports.

The budget last year allotted \$18,000 for intervarsity and \$7,000 for intramurals. But after the budget was approved by the Student Union, \$2,600 was left unspent by the intramurals and channeled into intervarsity budgets. The university also handed out a \$2,900 grant to cover other over expenditures in intervarsity sports.

Continued on p. 4.



Next week is Day Care Week in Edmonton, and the HUB Day Care Centre wishes to invite all interested persons to its open house happening Tuesday, March 11. Come in and see how the Centre operates, talk about its problems, and even suggest improvements, or just come in to see what's there. Hours are from 9:30 - 11:00 and from 2:00 - 5:30.

Hassle over Day Care improvements

CALGARY (CUP) The possible raising of Alberta daycare standards has provoked dissent from private operators here.

The present provincial requirement, now under review, is one staff member for every 20 children at the five-year age level. Calgary daycare consultant Eric Hefenden, said "Alberta standards are the worst in Canada," and expects the ratio will be raised with new legislation.

The national standard is one to twelve while the city suggests that one to 15 is an adequate requirement.

"We're not opposed to change," said Caroline Kiehalbauch, president of the Calgarian private operator group. "But we are opposed to a raise in standards that would drive us out of business."

Kiehalbauch rejects government subsidy of daycare

centres suggesting it is inconsistent with free enterprise.

"Subsidize the parents," she said.

Robert Franken, chairman of the University of Calgary Daycare Committee, said that a group of private operators have urged parents to oppose raising provincial standards by writing their Members of Legislative Assembly and other government officials.

Franken said the private operators have labelled cit-run daycare centres "cadillac subsidy" to play on the fears of parents.

Pointing to a large child-staff ratio as being detrimental to a child's development, Franken said that understaffed centres end up controlling the children rather than educating them. He stressed that children must have attention, the lack of which places them in "dehumanized experience."

citizens might relax and have coffee.

She said that the centre should be centrally located. A limited number of rooms in the Lister Complex have been provided for out of town participants; so the centre should be close to Lister Hall. A room elsewhere on campus, possibly in CAB, could be obtained, but it would just be that much farther to go.

On the other hand, a room in Lister Hall itself would be inappropriate for the centre since that would be too far from where the program is taking place.

Councillors queried Buebell on how much the university itself was contributing to the program and how many

senior citizens would be participating in it. She replied that the university is contributing no money except that some instructors are donating their time..

There were ten applicants as of last Thursday, but the deadline for applications is still some time in the future and Buebell could offer no estimate on the number of participants.

Ms. Buebell said that the program is operating on a very tight budget as a result of the department of advanced education not knowing how many people may be expected to enroll, and asked the council to waive the normal \$65 per day charge for the use of the Meditation Room. She offered, on behalf of the department of

extension, to pay a \$25 per day maintenance fee.

Finance and administration vice-president, Jack Redekop led the attack against the proposal to waive normal fees.

He said that it is the responsibility of the university to help finance programs like this and that the SU could not afford to forego any income it may be able to obtain from the Meditation Room "especially in its present financial situation."

Initially, debate by councillors went for waiving the usual fee, but the tide turned when Dent. rep. Blair Bennet pointed out, "We're not talking about just an outside group but potential students." Another councillor pointed out that the

Continued on p. 4.

SU donates Meditation room for U function

by Bob Blair

The Department of Extension will be sponsoring a Spring Session for Senior Citizens, and the Students' Union will be donating the Meditation Room in SUB to the department for the duration of the program, at no charge.

Cathy Buebell of the Department of Extension, at last Monday's Students' Council meeting gave a representation explaining the program and asking council to waive the normal \$65 per day fee on the Meditation Room to allow it to be used as a drop-in centre.

She explained that even though courses at this university are free to residents of Alberta who are 65 years of age or older, there are only nine in-

dividuals in this age group currently enrolled. So the provincial department of advanced education through the university department of extension will be spending \$20,000 to sponsor a program during the Spring term to orient senior citizens to university life and to allow them to become acquainted with the facilities and programs available here.

Ms. Buebell said that the organizers wanted a drop-in centre for the people participating in the program. She said that this centre would be manned by a resource person who would answer any questions the participants may have and that the centre would be a place where the senior

footnotes

March 6

U of A Camera Club - Movies in aid of Young Canadian Film Society - "Burn" and "Viva Zapata" both starring Marlon Brando. Time: 6:30 p.m., TL B1. No admission. Donations appreciated.

All Candidates Forum: Candidates from Strathcona riding will be at a forum on Foreign Ownership at 12:30 p.m. in SUB Theatre.

March 7

Edmonton Chinese Christian Fellowship. There will be a Bible study on James Ch. 1 & 2 with title "Faith in Action" during our regular meeting in SUB 142 at 7:30 p.m. All are welcome.

"Woman's Evolution - A Marxist View" is the topic of the Vanguard Forum to be held at 8 p.m. at 10815-82 ave. (Basement). The forum will examine the position of women in primitive society. Did the matriarchy exist? Is biology women's destiny? How can women achieve their liberation? Speaker will be Lynn Richards, a member of the Young Socialists.

March 8

Drama Dept. Grad. Production. The Beautiful People by William Saroyan, directed by Phil Wagner, will play at the Thrust theatre in the Fine Arts Center on March 8 at 8:30 p.m. and March 9 at 2:30 and 8:30

p.m. Tickets at Drama Dept. office; admission free.

Greenpeace Exhibit in HUB Mall. Help establish a 10-year moratorium on whaling.

March 9

The Edmonton Folk Club presents Jim McLennan, Garneau United Church Hall, 84 Ave. and 112 St., 8:30 p.m. Admission \$2.00, members \$1.00.

Chinese Cultural Association. Revolutionary Peking Opera "On the Docks". Admission free. Time: 1:30 p.m. and 7 p.m. 2 showings. Place: 2nd floor, 10168 - 97 St.

Coffee House. Sunday night at 7:30 p.m. Join us for an evening of live music and real coffee. At the Lutheran Student Centre, 11122 - 86 Ave., 439-5787. Special guest performer: Neil Ginther.

General

Students who would like to work for the cause of an Independent Democratic Socialist Canada are asked to contact Dr. Harry Garfinkle, Constitutional Socialist Party candidate in Edmonton-Strathcona. Leave message at Ed. Foundations II-5-181-K, or phone 433-5578. Students living in Avonmore may contact Mike Uhry, 469-3591; in Glenora, Bill Askin, 488-0036. Former Waffle supporters would be particularly welcome.

The Dept. of Psychology announces that Frank A. Geldard, psychologist at Princeton University

will give this year's first annual MacEachran Memorial Lecture Series.

Lectures on Monday, March 17th; Wednesday, March 19th; and Thursday, March 20th in Room CW-410, Biological Sciences Bldg. at 7:30 p.m.

classified

Experienced typist for term papers, thesis, etc. IBM Selectric. Call Maggie 488-0281.

Found - calculator in Dentistry-Pharmacy Bldg. Feb. 21/75. Phone 466-2929. Must be able to identify.

Lost: Lady's red wallet with gold trim in Rutherford or HUB, important ID. Contact Kathy 454-6450.

CAB Social on March 8. Band in attendance is Big Shot. Doors open at 8:30 p.m. and ends at 1:00 a.m. Admission \$2.50 per person. Bar service starts at 8:30 p.m.

Lost: White Samoid puppy, 13 weeks old, 15 lbs., 1 1/2 ft. high, 1 1/2 ft. long, answers to the name of Kudos. Reward offered. Ken Livdstrom 433-2602.

Female Tutor for Mathematics 30 wanted. Call 439-0172.

Employment Opportunities: Town of Stony Plain. Outdoor Pool Manager, Ass't manager, and lifeguard/instructors. Submit applications to: T.H. Wagner, Recreation Director, Box 810, Stony Plain, Alta.

Hayrides and sleighrides between Sherwood Park & Edmonton. Phone between 4 and 8 p.m. 466-3458.

Curl on the Weekend. 11:00 a.m. 8:00 p.m. Sat., 2:00 p.m. - 8:00 p.m. Sun. \$9/sheet for students, \$11/sheet other. In SUB.

Now booking Hay-Sleigh Rides Bonfires available - 2 miles West, 1 mile South of Ellerslie. Phone 434-3835.

Guaranteed summer jobs available. Join Routp program in CAF (military) and receive background for future employment with leadership training. Apply at Prince of Wales Armory Recruiting Office, 109 Ave. & 105 St., Sat., Mar. 8, 8 a.m. - 3 p.m. Final Application date is Sat. Mar. 15, 1975.

Immediate occupancy. 2 rooms Co-op house. \$55/month, 11128-83 Ave. Phone 433-8890.

Look Your Best: The University Yoga Club offers lessons in relaxation, facial exercises and massage for natural complexion. University Students and Staff are charged at a concessionary rate. For more information, phone the Keep-Fit Yoga Club at 439-7897 in the evenings, or write to Box 120, SUB P.O. 11, University of Alta., Edmonton.

Lloyds Amplifier with AM/FM Stereo. 8 track tape recorder, headphones, turntable and speakers. Will sell for \$200.00. Call: 433-0654.

Typing done, my home. Phone 477-2506.

OPTICAL PRESCRIPTION CO.

Two University locations



• 8215 - 112 St. 433-1645
College Plaza
• No. 230 - 8409 - 112 St. 439-5094
Physicians and Surgeons Building

The Film
**Cooperative Living
in a Kibbutz Society**
Friday, March 7
12:00 - 1:00
TL11 Admission Free

**NEED INFORMATION?
GOT A PROBLEM?
JUST FEEL LIKE TALKING?**

**CALL
STUDENT
HELP**

432-HELP
432-5288
432-4358

or drop in to
Room 250 SUB

11 a.m. - 10:30 p.m. MON-FRI.
7:30 p.m. - 10:30 p.m. SAT & SUN.

2 ACADEMY AWARD NOMINATIONS

BEST ACTRESS - GENA ROWLANDS
BEST DIRECTOR - JOHN CASSAVETES

PETER FALK / GENA ROWLANDS
JOHN CASSAVETES'
**A WOMAN
UNDER THE INFLUENCE**

ADULT NOT SUITABLE FOR CHILDREN

MATINEE SUNDAY 2 P.M.

STARTS TOMORROW!

FT. AT 6:45 & 9:24

**MEADOWLARK
CINEMA**

Something to "cheer" about:

Now the glorious beer of Copenhagen is brewed right here in Canada. It comes to you fresh from the brewery. So it tastes even better than ever.

CARLING O'KEEFE BREWERIES

Wild cow race at U.A. rodeo

In an effort to involve campus dudes in the U. of A. Rodeo, a Wild Cow Race is being featured. Anybody who wishes to be a cowperson for a day (this is an equal opportunity event) may do so by entering the event.

The Wild Cow Race is an event where all hell breaks loose. The cows are penned in the chutes, wearing halters with a long shank or rope attached. A team consists of three people with each person having an individual job.

A saddle man or rider is ready at the chute gate to open it at the sound of the whistle. A mugger and anchor man are ready at the end of the rope with the mugger being closest to the cow.

The mugger's job is to grab the cow's head and hold her stationary. The best way of doing this is to put his fingers into the cow's nostrils and twist upwards.

An anchor-man is just that. His job is best accomplished by taking only one wrap through the cinch and then dallying the latigo around the saddle horn.

When on board the rider should grab hold of the dally with one hand and the cow's tail with the other. This prevents the saddle and rider from being tossed over the cow's head. The cow must be ridden across the finish line, the saddle removed and raced back to the chutes to qualify.

The U of A Rodeo will be held at the Spruce Grove Agriplex on March 21 and 22. The performances will take place at 7:30 Friday night and at 2:00 p.m. Saturday afternoon. The Rodeo is held in conjunction with Bar None week.

Entries are now being accepted for the Wild Cow Race. Contestants must supply their own saddles, halters, and ropes.

No tackleberries or speed cinches will be allowed.

Due to the shortage of stock and time entries will be limited to 12 teams. Teams will be allocated to faculties similar to the Intramural framework.

with one team per unit.

Fees will be ten dollars per team. Deadline for entries is twelve noon, Friday, March 14. Phone entries to 439-3852.

For grads & faculty only

The Committee to Investigate Teaching is exploring the possibility of establishing on campus a Centre for Instructional Development, and will be seeking outside funding for the Centre. If such a Centre were established, it would be available to individual faculty members, teaching-assistants, departments or faculties who wish, on a voluntary basis, to improve their teaching-learning environment.

We have designed a questionnaire regarding possible use of such a Centre. This questionnaire will be sent to faculty and graduate students shortly. The Committee to Investigate Teaching would appreciate your taking a few minutes to reply, as soon as you receive your copy. If you do not receive a questionnaire and would like to have some input, please phone Dave Otto at 432-5295.

The Faculty of Arts 1975 graduating list will be complete by March 10. Arts Faculty students who expect to graduate at the 1975 spring convocation are asked to come to Humanities H 6-7 to enquire if they have not been individually omitted.

Trans Meditation for Creative Energy. Introductory lectures every Tues. 8:00 p.m. Tory Bldg. 14th Floor Graduate Student Lounge. Phone 465-6620.

HAIR-PORT
For Men & Women
West of the Inn on Whyte
15 % off
Complete Styling for Students
for expert results, call 439-4140

Ed student meet at Saskatoon

SASKATOON (CUP)
Students from the education faculties in the western provinces met Feb. 21 to 23 to establish a federated body to help solve their common problems.

The result was a concrete proposal for a Western Canadian Education Alliance which will now be sent to each education college society for ratification by March 15.

Discussion at the meeting concerned the structure of the proposed alliance, formulation of long-range goals and immediate steps to assist in meeting those goals.

The proposal contains provision for an elected Board of Directors consisting of one delegate from each member campus, and an executive committee composed of the presidents of each education student council in the organization.

The board can not be set up, however, until the member campuses ratify the alliance proposal. But Don Horncastle of the University of Saskatchewan was elected to supervise activities until the fall.

The conference adopted

the following long range goals: to provide a permanent format for improved communications to benefit education in Canada; to aid in the development of quality education;

to assist member associations in making more effective use of existing channels, i.e. teachers' federations, faculties, and departments of education;

to bring to the attention of the general public problems confronting education and educators;

to represent the professional interests of Western Canadian education students;

to explore similarities and difference of student associations in terms of goals

and objectives; to develop valid research in the area of curriculum education programs and school experiences.

To accomplish these purposes the alliance plans to publish a monthly bulletin for education students as well as an annual journal. Also planned is the compiling and distribution of a handbook detailing existing channels of communication and administration within faculties, universities, provincial and other organizations.

The first meeting of the alliance is planned for September, 1975.

LONDON RECORDING ARTIST

Paul Mann
IN CONCERT



appearing in SUB Theatre U of A
Tuesday, March 11 -

8:30 PM

Tickets at SUB Box Office
\$3 advance
\$4 at door

sound by the very special ARS Magnus System

APPLICATIONS ARE NOW BEING ACCEPTED for the position of Students' Council Speaker 1975-76 Term.

Forms are to be obtained from and returned to Students' Union Receptionist 2nd floor West, SUB.

The Council Speaker is responsible for:

(a) calling to order meetings of Student Council.

(b) the chairmanship of meetings of Students' Council

(c) the preparation of agendas and editions of official minutes

The Speaker earns a fee of \$20/meeting. For more info contact Rick Cooper, 74-75 Council Speaker, Office Rm. 259 SUB. Ph. 432-4236 office. Res. 433-9243.

Also: Students' Council Speaker By-law available from S.U. Receptionist upon request.

Entry Deadline: March 14

**PORTRAITS
of
DISTINCTION**

Goertz
STUDIOS

OFFICIAL CAMPUS PHOTOGRAPHER

NOW LOCATED IN ROOM 138 S.U.B.
Make Your Appointment Now
PHONE 433-8244

SPECIAL STUDENT PRICES

**Garneau
Studio**

8619 - 109 Street
3 Blocks east of campus.

**G
R
A
D
U
A
T
I
O
N**

This is a quality Sitting identical to our regular Portraits at about one half the usual price, with no loss in quality or decrease in service.

Sitting Charge \$5.00 - 4 poses taken - Proofed in Colour

This includes the retouching of one pose. Additional negative retouched for \$3.00.

In the case of packages or multiple prints, all portraits should be from the same negative.

One 8x10 - \$7.95 - Two for \$14.95

One 5x7 - \$5.95 - Two for \$10.95

Package (A)

1 - 8x10

4 - 5x7

4 - 4x5

6 - 2x3

\$59.95

Package (B)

1 - 8x10

2 - 5x7

4 - 4x5

6 - 2x3

\$49.95

Package (C)

1 - 8x10

1 - 5x7

2 - 4x5

6 - 2x3

\$33.95

Package (D)

1 - 5x7

2 - 4x5

6 - 2x3

\$27.95

Sittings must be taken before April 15th, and orders placed by April 30th.

Regular prices will be charged after these dates.

LEVESQUE, from page 1.

reported phenomenal increase in popular support.

Levesque very clearly states he does not wish to see the French culture and way of life in Quebec be diluted or assimilated into the British.

He pointed out similar

situations that occurred in Switzerland, Africa, and Pakistan, where the "melting pot" method of joining different cultures in some kind of peaceful, lasting union has failed.

Either forced repression of dissenting ethnic groups occurred, or new separate coun-

tries sprang up. Norway, once part of Sweden, is an example, and Bangladesh, once part of Pakistan is another.

"Do you know of any national group in the world," Levesque again asked, "that accepts or has accepted going down the drain?"

Granted, movements like the European Common Market, and other multinational union expresses man's desire to live in a global village, but this can only be done in any lasting way when all partners have a democratic equality, and the option of democratically removing themselves from the union is present.

Quebec, said Levesque, has not this option, but the increasing support for the Partie Quebecois is evidence the people want it.

"Everything for a Beautiful Wedding."

*Marnie's
Wedding
Shop*

- * Wedding Invitations
- * Napkins, Matches
- * Car Decorations
- * Hall Decorations
- * Candles & Bridal Books
- * Shower Gifts
- * Bridal Bouquets artificial
- * Church Candelabra
- * Cake Decorating Supplies

10% Discount on
Invitations

429-1022
10205 80 Avenue

EXTENSION, from p. 1.

participants would in fact be registered in the Spring Session and so would be more than potential students.

In the end, council not only passed a motion to waive all fees for the Meditation Room for the duration of the Spring session, but did so after narrowly defeating an amendment that would have charged the \$25 per day maintenance fee that the department of extension was willing to pay.

comes out of student fees, with \$5 per student going to inter-varsity and \$2 to intramurals.

But Sherlock says, "It is both logical and essential that the financing of these programs be placed under the university general budget."

Gray disagrees. "As soon as we don't control the money we don't control policy. I believe it is important that students have an input in determining the nature of the programs they take part in."

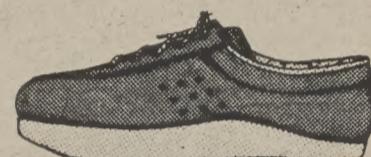
Rocky, Jr.

ENS - The fifth grade class treasury at the prestigious Buckley School for Boys in New York City is in good hands.

New Times reports that 10-year old Nelson Rockefeller, Jr. has been elected class treasurer, and that the class anticipates no heavy deficit spending.

Reasons for Roots.
No. 4. Naturally shaped toes.

Roots roomy uppers aren't shaped like ordinary shoes. But they are shaped like ordinary feet. Your toes will stay healthfully uncrowded.



The Sport Root,
one of 10 styles.

Sold only at Roots shops.
Gift certificates available.

10219 Jasper Ave.
429-2044

City feet need Roots.

ARTS & SCIENCE FACULTY ELECTIONS

**NOMINATIONS WILL BE ACCEPTED
BETWEEN THE HOURS OF 9 AM AND 5
PM ON FRIDAY, MARCH 7, 1975 in
ROOM 271 SUB FOR THE FOLLOWING
POSITIONS:**

ARTS
2 SU COUNCIL REPS
6 GFC REPS

SCIENCE
2 SU COUNCIL REPS
6 GFC REPS

**NOMINATION FORMS ARE AVAILABLE
IN THE SU GENERAL OFFICE 256 SUB.**

ATTENTION FACULTY OF ARTS STUDENTS

Nominations of student candidates for the 1975-76 Faculty of Arts Executive Council will be received from March 10-13 (noon), and the elections will be conducted during the period March 17-20 (noon).

Total number of vacancies: 31 (according to an established departmental representation formula).

Eligible students: full-time undergraduate students registered in the Faculty of Arts. Normally students will stand for election and vote in the department under whose jurisdiction their area or proposed area of concentration falls. (Students will need Students' Union Identification Cards in order to vote).

Term of office: July 1, 1975 - June 30, 1976.

Meetings: normally once a month throughout the academic session.

For additional information re: nomination and election procedures, consult the various departmental offices in the Arts Faculty.

Frustrated library

At a recent meeting with Geoff Williams, President of N.A.S.A., the library employees were led to believe that the non academic staff on campus are happy with the way negotiations have been carried out on their behalf. The library staff does not fall into this category of being happy and satisfied with the situation. We have therefore

written this letter to publicly express our views.

During the above meeting with Geoff Williams we made several suggestions as to ways of notifying staff prior to the ratification meeting of the specifics of the items to be ratified, including salary. The N.A.S.A. executive discussed and rejected our suggestions.

Since this meeting with Geoff Williams we have found that a resolution was passed at the May 7th, 1973 General Meeting as follows:

RATIFICATION

WHEREAS many members attending the annual

ratification meeting did not feel they were given enough time to consider the points they were to ratify;

BE IT RESOLVED that for future ratification meetings, the points to be ratified be published with the notification of meeting.

We have been frustrated by the secrecy of negotiations to this point but we feel that the above resolution would ease this feeling of discontent if it is carried out, providing it includes, the actual percentage and specific details of all items to be ratified. This would alleviate the pressure felt when one must make a rapid evaluation immediately prior to the vote.

We at the library are holding discussions among ourselves to arrive at an acceptable percentage before attending the ratification meeting. We hope this letter will induce others to do the same.

We also hope this letter will inspire fellow non-academic staff members to air their views publicly.

Shirley Norris
representing 129 Library
Employees

King Midas speaks out

I wish to provide the following information to the students at the University of Alberta with regard to the activities of the Council of Minister of Education of Canada Advisory Committee on Student Support.

Starting in late 1973 and continuing on into 1974, the Council of Ministers of Education of Canada (CMEC) voiced concern with regard to adequate policy development in the area of student support by the federal government. The major problem was that, at the level of policy for student support, the federal Secretary of State was responsible; at the administrative level, the Department of Finance was responsible for the Canada Student Loans Program. In May of 1974 the Province of Ontario requested that a federal-provincial policy forum be developed for the purpose of discussing problems in student support. The Council of Ministers of Education appeared to be a reasonable vehicle for this discussion. As a result of urging from Ontario, the Council of Ministers of Education requested that the Secretary of State identify an official of his department who could address the issues raised by the Council of Ministers of Education.

As a result of the requests of the Council of Ministers of Education a meeting was arranged June 26, 1974 which I attended for the Province of Alberta. At this meeting a draft mandate was presented to the group of provincial officials requesting that they consider changes which would be brought about in the existing federal student support program (CSL) with regard to, especially, certain known problems such as assistance to part-time students. In addition, the group was requested to study the possibility of coordinating a variety of federal student support programs and to report on other conceptualizations of student assistance which might ultimately replace the existing programs. The mandate clearly directs the group's attentions, however, towards remedial activity pertaining to the existing Canada Student Loan Program. The committee accepted the mandate. At this meeting the provinces were requested to submit statements with regard to problems which they envisioned in the area of student support.

In September of 1974 the group once again met in Toronto and discussed the question of problems in student support. At this meeting the group arranged their activities in line with the August 1975 deadline for their report to the Council of Ministers of Education.

On November 21st the group once again met and reviewed briefs which were presented by the staff of the Secretary of State and provinces with regard to specific conceptual problems in student support, such as its relationship to educational opportunity, the question of the allocation of educational costs, interprovincial mobility of students, etc.

In December, the students at UBC requested that the Minister of Education of British Columbia consider student representation on this working group. The Secretary General of the Council of Ministers of Education replied in December to the effect that Council policy precludes students from serving on committees of the Council of Ministers of Education.

On February 13th, 1975 the group once again met, this time in Ottawa. The Canadian Union of Students was pressing the issue of representation on the Committee. They were notified by the Co-chairman of the Committee that the Committee could not place them as active members on the Committee for that would transcend the expressed policy of the Council of Ministers of Education. The Province of Alberta made a motion that the students present be invited in to discuss, informally, the activities of the Committee. The motion was defeated. Further, the Province of Alberta made motion that day be set aside at the next meeting of the Committee for public input and that academics, students, Awards Officers, and other interested members of the public bring forward at that meeting briefs and make representation to the Committee. This motion, too, was defeated. The recorded vote here would be highly amusing to students of political science.

The above offers a brief description of the activities of this Committee. The Committee is bound to report to the Council of Ministers of Education with regard to short-term corrective measures which can be made to liberalize the present Canada Student Loan Program. It should be stated that this Committee is not mandated to design a comprehensive student support system for Canada. Increasingly, I am of the view that this is near impossible. In my estimation, therefore, there is no sinister plot to bring about a general alteration of student support in Canada. The fact that this group is meeting in secret (in my estimation, the charges of the students in this regard are absolutely true) is more rightly a mistake rather than indicating some malicious motive on the part of the Committee or the Council of Ministers of Education itself.

Those students who wish to seriously pursue the question of Alberta's participation on this Committee, or, for that matter, any other question of student support, I encourage you to contact me at 427-5609.

P. A. Tietzen
Chairman
Students Finance Board

Mouthy "boys"

It would seem the "boys" from Red Deer College have had too much to drink again. Instead of flapping their yaps in the *Gateway* (Feb. 4) they should put their bottles where their mouths are!

The Ninth Henday Chugging Team challenges Red Deer College Beer Drinking Team to prove their mouths can be as full of beer as hot air.

Contact us and we'll set it up in the near future.

Rick MacDonald
Chugging Coach
9th Henday

Bottoms down

Please convey our deep-seated and bottom felt appreciation to the noble men with brushes who sanded and varnished the benches in the Phys. Ed. Building during Reading Week. Our thanks comes with great tenderness and softness (those splinters and slivers were so unkind.) Once again from our very bottoms, thank you.

From all the bums on campus, signed Gladus, TenderRump

Rank amateurs

In the Reading Week edition of the *Gateway*, Lawrence Wargrave was attacked by several people on account of his *Hot L Baltimore* review. One letter in particular, by Craig Proulx, made me wonder about the amount of insecurity there apparently is in the Drama Department.

Mr. Proulx states that he has been amazed at the poor quality of theatrical reviews found in the *Gateway*. Well, Mr. Proulx, I have been amazed at the poor quality of theatre I have seen at the U. of A., and I think a bit of cynical criticism directed towards the department is the most deserving write-up the *Gateway* could print.

Mr. Proulx condemns Wargrave for his apparent lack of theatrical knowledge. Of course, no one could know as much about drama as drama majors themselves, as Mr. Proulx so proudly informs us he is. He attacks Wargrave for criticizing the New York Drama Critics' Circle. Mr. Proulx, is the N.Y.D.C.C. above criticism? I am not an intellectual, yet the rationale for this criticism which "escapes" Mr. Proulx is quite obvious to me as a layman. Wargrave simply disagrees with the group's opinions.

Mr. Proulx stumbles on to state that Wargrave has no business criticizing the Drama Dept., which is the single most ridiculous statement in his letter. Indignation! Omigosh, the Drama Department has been criticized! Insulted! Mr. Proulx, anyone, anywhere, has the right and the business to criticize the Department, and right or wrong, Wargrave is entitled to his opinion. Mr. Proulx would be well advised to realize that when he escapes the womblike confines of the Fine Arts Building, there is a big world waiting for him, and there will always be critics who will insult and criticize. If Mr. Proulx wishes to become a professional, he should first learn to take criticism like a professional, instead of carrying on his immature, reactionary, and totally irresponsible responses.

It is interesting to note that Wargrave is accused of having no knowledge of theatre, yet Lawrence Wargrave is a drama major himself. He is one of the finest actors I have ever seen, and although I saw him in a highschool play five years ago, his talent then far exceeds most of the actors I have seen here in Fine Arts.

I sincerely hope that Craig Proulx is not indicative of the opinions, attitudes, and mental processes of most drama students, for if he is, their amateurish inability to take criticism and build from it will seriously main any hopes they might have of making it outside the U. of A.

Gordon Turtle
Arts 2

Gateway

Volume LXV, Number 44
March 6, 1975

Published bi-weekly by the University of Alberta Students' Union, in the Gateway offices, Room 282, Students' Union Building.

Editor-in-chief: Bernie Fritze

SENIOR EDITORS

News Editor: Greg Neiman
Arts Editor: Harold Kuckert
Sports Editor: Cameron Cole
Photography Editor: Brent Hallett
CUP Editor: Cathy Zlatnik

STAFF

Kim St. Clair
Scott Partridge
Nancy Brown
Rick Fritze
Greg Karwacki
Ray Popkaitis
Marc Leland
Norm Selleck
Mary MacDonald
Leo Block
Mike Morrow
Stu Duncan
Kathy Broderick
Bob Blair
Judy Hamaliuk
C. Geddes
F. N. Crory
Diane Kermay
Buster Keaton
Nanker Phledge

CIRCULATION

Circulation 18,000. The *Gateway* publishes on Tuesday and Thursday during the Fall and Winter Session. It is distributed to the students and to the academic and non-academic staff on campus.

Subscription rates: 54 issues, \$7.00

Circulation Manager: Jim Hagerty

PRODUCTION

Ad make-up, layout, and typesetting done by Student Media, University of Alberta, Room 238, Students' Union Building.

Production Mgr: Loreen Lennon
Typesetter: Margriet Tilroe-West

ADVERTISING

No mats accepted. National and local advertising \$28 per agate line.
Classified ad rate \$1.00 per issue.
All classified ads must be prepaid.
Advertising Manager: Tom Wright
432-4241

FOOTNOTES

Publicizes campus events or those of interest to students without charge. Footnotes forms available at the *Gateway* office and should be submitted before 2 p.m. Mondays and Wednesdays.

Footnotes Editor: Cathy Zlatnik

LETTERS

Submit all letters, typed and double spaced to the Editor, who reserves the right to edit the copy. Regular copy deadlines apply.
Editorial comments are the opinion of the writer, not necessarily that of The *Gateway*.

GRAPHICS

Submit all graphics and cartoons, by copy deadlines to:

Graphics Editor: Gary Kirk

COPY DEADLINES

Monday noon for the Tuesday edition. Wednesday noon for the Thursday edition.

TELEPHONES

Editor's office
432-5178
All departments
432-5168
432-5750
Student Media
432-3423

The *Gateway* is a member of the Intercollegiate Press and The Earth News Service.

Ballet not so grand

One might have predicted that Les Grands Ballets Canadiens would present an exciting rendition of *Romeo and Juliet*. Premiering at Festival Canada in 1973, the blurb goes, choreographer Brian Macdonald combined "the original poetry with music, sculpture and dance." But from the moment that the Montagues and Capulets rushed on stage to do each other in, one knew that such optimistic hopes were not to be fulfilled. The starkly modern sets, although fine in their own right, clashed with the sumptuous costumes. The Renaissance music, again a fine innovation in itself, provided an even background tone that the dancers could rarely transcend. There was little sense of dramatic confrontation so evident in Shakespeare's play. In fact excerpts from the play read over loudspeakers were often more exciting to hear than the movement was to watch.

The production suffered from lack of focus, particularly in the first half. The choreographer, by trying to say everything, deprived the audience of the single viewpoint that would have resulted in an aesthetic coherence. Character was suggested by costume rather than movement and little sympathy was evoked for the hero. Incessant activity - numerous entrances and exits, the too acrobatic pas de deux in the balcony scene - only wearied the viewer instead of creating the much-needed emotional impact.

The second half was more successful. The voices distracted less from the dancing - except in the final death scene which would have been more powerful had it proceeded in silence. Individuals had a chance to make a coherent statement - as Lady Capulet did in her mourning scene. Romeo and Juliet's wedding-night scene was beautifully conceiv-

ith an interesting use of the sculpture as a bed. Here Annette Av Paul expressed the lyricism that would come to a climax in the final scene. Unfortunately her isolated tremors only spoiled this quality and one wished that this foreshadowing of tragedy had been used and exploited more fully at another time - for instance when Juliet learns of Romeo's fate and the carnival character of death becomes her partner.

In general, this dance lacked a clear idea of just what it was supposed to convey and of how the various media were to be disciplined to serve this end. What could have been a powerful assault ended in numb confusion. The distances between classical and modern ballet and mime were not successfully bridged. Shakespeare's words and Macdonald's dance rarely complemented each other but competed. If an image of the Renaissance was to be evoked, why the modern set and why not dance patterns based on traditional ones? There were many chances to increase focus and impact by increasing the use of symbolic images. The tragedy of personal desires thwarted by social conventions could have been emphasized with more obvious contrasts of the jesting and carnival scenes with those of death. But this was not possible within the restrictions imposed by remaining faithful to a sequential narrative.

The second dance, *Tam Ti Delam*, was much more satisfying. Much of this was due to Gilles Vigneault's music, whose vitality the dancers were able to match. Unhampered by costumes, they had greater opportunity to display their technique with Macdonald's more cohesive, clear and dynamic choreography. The arbitrary division into six movements provided a logical

variety of group and duet dances. The acrobatic display and square dance patterns evoked a village hall setting that needed no amplification by extraneous details. John Stanzel's comic characterization of an old Quebecois provided unifying transitions throughout the dance. Although less profound and complex than the first work, this one's direct emotional appeal and concise organization created a more immediate response and ultimately, made it more memorable.

C. Geddes



Watergate in French Canada? So claims Rejeanne Padovani, a film that focuses on a dinner party to give a cynical view of Canadian politics. The highly praised work is part of Edmonton Film Society's International Series, and will be shown on Mar 10 at SUB Theatre, 8 p.m.

arts

Orchestral but not spectacular

Last Saturday evening at the Jubilee Auditorium, the Edmonton Symphony, under the direction of Pierre Hetu, presented a program which had been advertised as an "All-Orchestral Spectacular" and which featured music of Schumann, Tchaikovsky, and Shostakovich.

The first half of the program consisted of two compositions which had been inspired by literary works: Schumann's Overture to Byron's dramatic poem *Manfred*, and Tchaikovsky's Fantasy-Overture *Romeo and Juliet* based upon Shakespeare. The *Manfred* Overture produced an antiseptic effect, completely purged of any element that could be classified as dramatic. The opening syncopations lacked intensity and impact, the trombone and trumpet outbursts (near the end of the overture) sounded curiously restrained rhythmically and dynamically, and the bowed tremolos which pepper the string parts seemed insufficiently energetic.

The performance of the *Romeo and Juliet* Fantasy-Overture can best be described as passionless. Mr. Hetu once again displayed his inability or unwillingness to distinguish between piano and forte dynamics; and the effect once again was monochromatic. He

also ignored many of Tchaikovsky's explicit instructions regarding articulation, thus depriving the work of much of its eloquence. Never has the duel scene been treated so cautiously in my presence; an amateur fencing club using blunted swords would have sounded thrillingly orgiastic by comparison.

The youthful Shostakovich *First Symphony* - he was nineteen when he composed it - concluded the program. Personally I find this symphony, as with much of Shostakovich, charming but otherwise redolent of facile sterility. Apart from the rather cold and dry punctuations in the brass, I am most convinced by the near passion of the third movement (*Lento*). For a program of this sort (that is, a showcase for the ESO alone), this symphony was a discreet choice in that it allowed many first-chair musicians the opportunity to display their abilities the work abounds in solo material.

The evening performances were solid and clean but one departed, partly due to the choice of program, with the impression: "Orchestral" yes, "Spectacular" no.

F. N. Crary

Keaton and the Cameraman on campus

The *Cameraman* was Keaton's first film after moving over to MGM and forsaking his own studio, and, although you couldn't tell it from this movie, the decision to go over to one of the big studios proved Keaton's downfall.

One of the most talked-about but least-seen of all

Keaton's features, *The Cameraman* has Buster as a sidewalk tintype photographer, switch over to a movie camera in order to please his girl (Keaton is always doing things to please his girl). Trying to get news footage to sell to MGM, he runs into all kinds of disasters. He gets launched with a boat whose launching he's trying to photograph, and gets caught in the middle of a tong war. The latter sequence contains remarkable passages in which Keaton, attempting to film a deadly street-fight as it's happening, asserts the prerogative of all directors and tries to rearrange the reality in front of the camera to his greater aesthetic satisfaction.

Keaton has for years lived in the shadow of Chaplin as a silent-comedy actor/director. Over the past couple of years all of Chaplin's features (with one or two exceptions) have been re-released and even shown on television; but of Keaton's output we get only crumbs - an odd showing of *The General*, or, if we're lucky, *The Navigator* or *Sherlock Junior* - from his 12 feature films.

It's a pity about Keaton's relative neglect, because in his own way, he is Chaplin's equal, and that's saying a lot. Where Chaplin is always, even the midst of his most vulgar scrapes, something of a poet, Keaton remains down to earth at all times. In fact Keaton's films are perhaps the supreme example of *physical* cinema in history. Of course Keaton was always known as "The Great Stone Face", but the effectiveness of his immobile but never inexpressive countenance depends very much on the manic activity of the rest of him.

It's astonishing in these days in which every sort of impossibility is accomplished

on the screen with editing, double exposure and back-projection, to see Keaton doing the impossible with no strings attached. The typical Keaton sight-gag occurs in a single shot, with the whole of Keaton's body visible: no funny business with the camera, only in front of it. If he hadn't been one of the movies' greatest comics, he could certainly have become their greatest stuntman.

Keaton is perpetually obsessed with objects, with machines, in his films and with good reason: he is their master. With people he has more difficulty. Whenever he has to woo his girl in the front parlour, catastrophe is the result; but if he has to save her from being swept over the falls or run over by a train - no problem.

The Cameraman is virtually Keaton's valedictory film. After it he never again had control of his own project, and one of the greatest of all cinematic geniuses faded ignominiously from view.



This Thursday the Graduate Students of English continue with their "Great Directors" Series with Buster Keaton's 1928 feature *The Cameraman*. Shows are at 4:00, 6:30, and 8:30 in the Humanities Building Audio-Visual Centre (Room LT-1). Admission is \$1.00.

Z.Z. don't top Chilliwack

by Nanker Phledge

6,000 concert fans were at the Kinsman Fieldhouse to see what was billed as the best rock'n roll to come out of Texas since the death of Janis Joplin and 6,000 fans went home without seeing it. What everyone did see was ZZ Top, who fell short of their crowd's anticipated expectations.

It wouldn't be fair to only blame the band. The sound system was noisy, and the Kinsman Fieldhouse is far from being perfect to host concerts in. The only real treat at Tuesday's performance was the return of Chilliwack.

Chilliwack again served as an excellent warm-up show. In their professional style they moved through eight numbers and played for a solid hour, including their encore. Their songs were all from the latest *Riding High* album, with the old crowd favorites Raino, Groundhog, and Lonesome Mary being thrown in for good measure.

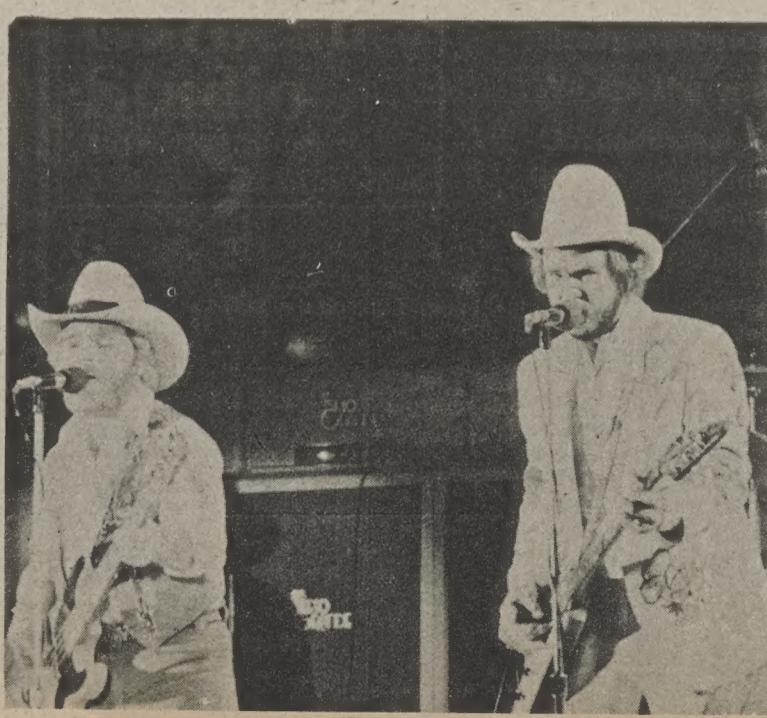
The only disappointing thing about Chilliwack is the frequency with which they appear in Edmonton. Any group who tour through Edmonton as often as they do suffer from familiarity. Nevertheless, Chilliwack must be credited

with giving the concert fans their money's worth. They are a great band.

ZZ Top is not a great band. Other than having a drummer who played his eight drums and four cymbals like he had two or three sets of arms, the crowd saw little else that would induce them to buying a ZZ Top album. Their songs were tedious, their stage antics trite, and their vocals were weak. The cowboy

outfits were certainly unique, but who goes to a rock concert to see fancy duds on dudes?

Brim stone Production sponsored the show, and did good job of attracting a near capacity crowd. Brim stone runs their productions very efficiently with very few screw-ups. The only mistake they made this time was in selecting a band, and they don't make that mistake often.



SPORTS

GK

Crawford a question mark as hockey Bears head for semi-finals

by Cam Cole

The Golden Bear hockey club will be in reasonably good health when they face the Quebec Conference Loyola Warriors this weekend, with the winner advancing to the Canadian College final next week.

The only player who may see limited action is center Bruce Crawford, who severely bruised his left shoulder against



Bruce Crawford - shoulder injury still painful.

National Track/Field here this weekend

The biggest Track and Field event ever to be held in this city is scheduled for the Kinsmen Fieldhouse this Saturday and Sunday.

The Canadian Indoor Track and Field Championships, with the best Canadian athletes competing in Junior and Open age groups, will be the selection meet for the International event against West Germany next Friday in Montreal.

The meet will afford fans the chance to see world-class athletes such as:

- Grant McLaren (Ontario) World ranked middle distance runner

- Claude Ferragne (Quebec) A 7'3" high-jumper from Montreal

- Diane Jones (Sask.) Canada's Olympic-class Pentathlete

- Abby Hoffman (Ont.) Olympic finalist in the 800 meters

- Joanne McTaggart (Sask.) Set world 300 m. mark in CWUAA meet last week

- Brenda Walsh (Edmonton) It was her record that McTaggart broke

- Barry Boyd (Edmonton) Defending long jump champ

- Randy Makalosky (Calgary) Record holder in 800 meters

- Debbie Brill (BC) A 6'2" high jump this year

Along with Walsh and Boyd, Edmonton athletes George Smith (400 m.), Shauna Miller (1500, 300 m.), and Tom Manske (3000 m. walk) are considered to have good chances to make the International team.

Preliminaries begin both days at 11:00 a.m., with finals going Saturday at 7:00 p.m. and Sunday at 3:00 p.m.

by Al Cinder

UBC two weeks ago, and missed the Brandon series last weekend.

Crawford is wearing a special molded-plastic, cast-like apparatus on the injured shoulder. Mobility, according to Crawford, isn't affected by the added equipment, but he is still experiencing pain whenever he shoots the puck.

Trainer Ray Kelly says Crawford actually sustained injuries in three separate parts of the shoulder area, "any one of which might have kept him out of action" - when he was crunched against the boards by BC defenceman Rod Hare in the 2nd game of the CWUAA finals.

Other players injured in the series: Jim Ofrim and Kevin Primeau will take regular turns; although Primeau's left leg remains heavily bandaged.

In their only previous meeting this year, Bears dropped a 5-4 decision to the Warriors in the Sudbury tournament, held during the Christmas break.

Coach Clare Drake, along with Ross Barros, Brian Middleton, Crawford, and captain Steve McKnight, were in Europe with the Student National Team at the time.

Loyola is considered to be one of the toughest clubs in Eastern Canada - rated 2nd or 3rd in the nation for the latter half of the regular schedule.

Should the Bears win this weekend, they would host either the Toronto Blues or the St. Mary's Huskies in a best-of-three series for the National Championship next weekend.

Merrill - behind every good team...

by Cam Cole

"The biggest thing is getting the guys to think you're doing everything they want you to do, when really, they're doing all the work. If you can do that, the job's pretty simple."

Sounds like management talking, doesn't it? Well, it is.

Doug Merrill's the team manager for the Golden Bears hockey club, and he claims that the better part of his job is handling the players - and the coach. "Like (Bryan) Sosnowski and (John) Horcoff, for instance. If they're getting in my hair while I'm trying to get things done, it's no problem. I just throw a ball of tape at Sosnowski, and say Horcoff did it - they'll spend hours pushing each other around, laughing, shouting - and I don't have to worry about them."

Merrill, in his first full year as a combined baby-sitter, den-mother, and equipment manager, says that the actual duties he must perform aren't that difficult. "You worry about things. Like the way players float in and out of here (arriving about five minutes before a bus is scheduled to leave for a road trip, without having their equipment packed), you can never tell when a player is going to forget his skates or something."

"You always worry about skates - that's the worst thing that could possibly happen - forgetting skates. Of course, I've forgotten tape, and pucks, and I felt a little silly when Stewie missed the plane to Vancouver." (Apparently they don't pipe the announcements of departure times into the washrooms at the International Airport.)

"It's kind of tough trying to handle 20 different personalities.... we've got some high-strung players, players like Middleton (Brian) who's probably been pampered all his life, and now his wife probably pampers him, and guys expect me to do the same thing," he



Doug Merrill displays the tools with which he "handles" difficult members of the Bears' hockey team.

says with a grin.

Merrill's duties include handling most of the arrangements on road trips, meal money for players, room assignments, keeping equipment in repair, making sure sticks, equipment bags, uniforms, mechanical equipment, and first aid materials are all packed for the trips.

In addition, he is a sort of buffer between players and coach.

"I guess I get it from both sides a little," he says. "I know things are going well when the coach has nothing to complain about."

"There's a good feeling on this team.... a lot of players have come up to me and said they thought this is the best organization they've ever played for. You can put any two players

together and never have to worry that they won't get along. They are different types, but they handle it well... and that's what it's all about - getting along with other people."

Merrill is a 24-year old student, who will have an Arts degree after this year, and possibly a Computing Science degree if he decides to complete six more courses.

"I'll be around next September, though, whether or not I decide to go for the CS degree. There's really no other manager around, and it might be tough on the coach, trying to find somebody right away."

It's apparent that Merrill has the greatest respect for Coach Drake. "I think the reason I took this job is that I've always been drawn to athletics. My big dream is that one of these days, six or seven of the players are going to get caught in a snowstorm or something, and the coach is going to have to suit me up and put me out there," he says. "He (Drake) is the best, though - there's nobody better in this league... he never says anything demeaning to a player - it's always something constructive, though the players sometimes don't see that."

The job doesn't pay him anything, he had no real training for the position, and he receives no credit for the work he does - so why does he do it?

"Good times, I guess - it's a good sort of feeling being part of a team, even if you're not really out there playing."

You never really know whether "Slapshot" (his nickname, courtesy of the players) is serious about thinking of playing for the team - he skated and practised with the team for several weeks. Maybe he is serious.

Then you see him poised, machine gun, whip and switchblade in hand, wearing a woolen poncho and a hat with a picture of a duck that says "Drake's Raiders" on it, and you wonder.

More SWIMMING, page 8.

THIS WEEKEND

Hockey - Golden Bears vs. Loyola Warriors at Varsity Arena in the semi-finals of the Canadian College Championships.

- 8:00 p.m. Friday and Saturday, and 2:30 p.m. Sunday (if necessary)

Badminton - U of A teams travel to Calgary for the CWUAA finals, with the Pandas defending their title, and the Bears hoping to win one of their own.

Fencing - The U of A squad defends team title at CWUAA finals in Saskatoon.

went to the hospital and was told to rest ten days for a bad case of flu. He then went to the pool and placed third in the 100 fly and second in the 100 back and 400 free relay, the last two his best times ever.

Mark Polet finally got his backstroke together and finished sixth and seventh in the 200 and 100 back. Ron New and Chip Wilson continued their 200 individual medley grudge match and pushed each other to taking three seconds off their times. Their swims, together with John Starratt's, made the 200 IM into the biggest point getter for the team.

Stewart Nelson finished among the finalists in the 1650 free, 500 free, 400 individual medley, and 800 free relay. Up and coming distance star Tom Degroot took a total of 64 seconds off his times and made it look easy.

CWUAA three meter champion Rob Edmunds made the final in the three meter diving.

Here, then, is the second best men's swim team in Canada. If you see a guy with shaved legs, don't laugh, shake his hand.

Derek Cathro 100 back 2nd, 100 fly 3rd;

Tom Degroot - 1650 free 10th, 400IM 5th in consolation, 500 free consolation final;

Rob Edmunds - 3m diving final; Barry Kennedy - 50 free 4th, 100 free 6th;

- Ross Nelson - 1650 free 1st CIAU record, 500 free 1st CIAU record 400 IM second;

Stewart Nelson - 1650 free 7th, 400IM consolation finals, 500 free 2nd in consolation;

- Ron New - 200 IM first in consolation final;

Mark Polet - 200 back 6th in final, 100 back first in consolation 100 fly consolation final;

John Starratt - 200 free 1st, 200 fly 1st, 200 IM second;

Chip Wilson - 200 IM 4th, 100 fly consolation final

RELAYS

400 free (Ross Nelson, Derek Cathro, John Starratt, Barry Kennedy) second.

800 free (Stu Nelson, Barry Kennedy, Ross Nelson, John Starratt) second.

400 medley (Mark Polet, Ron New, Chip Wilson, Barry Kennedy) fourth.

Intramurals back in business

by Stew Duncan
Men

After a week of studying and reading (?), the world of Intramurals resumes.

Our badminton tournament concluded before Reading Week under the able supervision of Wolfgang Jeske and Nelson Raas. Winner included: "A" singles - Francis Cheng (Theta Chi); "B" singles - Roland Aver (Medicine); "C" singles - Alphonse Roberts (Education); "A" doubles - Vernie Yee and John Horna (Arts and Science); "B" doubles - John Ip and Joseph Tang (Chinese Students' Association); "C" doubles - Randy Edgar and Robert Thompson (Commerce).

At the end of Reading Week, our field hockey tournament concluded, thanks to

some dedicated work by Hashmuk Kanjee and Bruno Bavarro.

In an exciting "A" event final, Larry Filipow led his upstart Physics crew to a 2-1 championship victory over a "never say die" Upper Residence squad.

In "B" event, the Deke's unit claimed the championship laurels by eliminating Dentistry.

Many activities are upcoming and entered participants are urged to check with the Intramural Office for starting times.

Are you an avid table tennis buff? Our ping-pong tournament happens Sunday, Mar. 9 from 9 a.m. to 5 p.m. at the Education Gymnasium.

Don't forget the final co-recreational inner tube water

polo tournament with action commencing at 7 p.m. on Wednesday, Mar. 5 at the Main Pool.

All participants in hockey and volleyball are encouraged to check with the Intramural office for information regarding the play-off structure of these two major activities.

Racquet sports enthusiasts, who concluded the season on the first rung of our challenge ladders - please report to the Intramural office immediately. Information about scheduled times of play-off matches will be provided.

Present unit standings have Medicine in first place with Law closely trailing in Conference "A". In Conference "B", Kappa Sigma is resting comfortably in first place, with the Theta Chi fraternity in second spot.

We salute Gary Dupuy of Geology as our "Unit Manager of the Week." Gary has been providing a great service to his fellow rockhounds and is very deserving of the tribute. Keep up the good work!

Our Intramural "Participant of the Week" is Tony Lambert of the Lambda Chi Alpha fraternity. Tony is presently participating as a finalist in both the racquetball and squash playoffs. Tony has also displayed his prowess for Intramural participation in many other activities this past year!

Women

The Women's Intramural program has only a few activities left for you to participate in. 5-on-5 Basketball will be played on Thursday, March 6 in

Eskimo legends by Stage 6

Stage 6, the performing group of the Citadel Theatre's Drama Workshop program, will be making their debut on the theatre's main stage Wednesday, March 12th with their production of Charles Cohen's dramatization of Eskimo legends *Land Before Time*. This is the first production of *Land Before Time* to be seen in Western Canada.

Land Before Time has been described as one of the most dramatic and moving representations of the legends of the Eskimo people ever written. In a combination of dance, music and lyrical narration, the world

as we know it is created, but is created in the terms of the Eskimo people. In its moving eloquence, *Land Before Time* captures in full, the way of the "children", from their joys to their sorrows, the ways of their gods and the ways of their people.

The performance starts at 12:10 p.m. (noon) and admission is a dollar (\$1.00).

At the Hovel



Songwriter/performer Bruce Miller will appear at the Hovel Friday, March 7 through Monday, March 10. Playing acoustic, electric and bottleneck guitar as well as a 150 year old fiddle, Miller should provide some fine country and bluegrass music.

Pool Pandas triumph

by Mike Morrow

The Pandas won the CWIAU swimming championships for the second straight year at Thunder Bay last week.

They triumphed over the Lakehead U team by a score of 272 to 240. The teams for Calgary and UBC also placed in the top five to give a convincing demonstration of western power. The meet was the best to date in terms of quality swimming.

Dianne King was the only event winner for the Pandas, as she took the 100 and 200 breaststroke and 200 butterfly races, all in record time. However, every member of the team scored points by placing in a final or a consolation, and this depth provided the winning margin.

Here are the Canadian Champions. Kim Browning - 100 back 5th, 200 back 6th; Mary Jane Henning - 100 free 6th, 200 back 7th, 100 back 8th; Dianne King - 100 breast 1st, 200 breast 1st, 200 fly 1st;

Wendy Kruger - 100 breast 7th, 100 free 7th, 50 free 9th; Rae Lightbody - 299 back 12th; Pat McKinley - 400 IM 6th, 400 free 9th, 800 free 9th; Karen Nelson - 400 IM 3rd, 400 free 3rd, 800 free 3rd; Lynn Purdy - 200 IM 2nd, 100 fly 4th, 200 fly 4th; Myrna Spilde - 200 IM 4th, 200 free 6th, 100 fly 10th; Shelia Zieper - 1 m diving 12th.

The Bears went to extend their thanks to the Pandas for their share in winning the unofficial combined (men and women) Canadian Championship.

Ernie's STEAK PIT LTD
For Elegant Dining
Licensed Lounge
Open 'til Midnight
FREE PARKING
reservations: 469-7149
40 Bonnie Doon Shopping Centre

BRANDO FILM FESTIVAL BURN and VIVA ZAPATA

Tues, Mar. 4 - 7 & 9 at P126

Wed, Thurs & Fri, Mar. 5, 6 & 7 TLB1

Donation - \$1.

LACOMBE



A FILM BY LOUIS MALLE
Starts Friday
Rialto 2

Academy Award Nomination
Best Foreign Film of the Year

Pauline Pael, The New Yorker:
A knockout. In all the important
ways, Malle succeeds triumphantly.
A major work.

Paris Match, Le Monde, L'Express:
Masterpiece.

Roxy Theatre Film Festival

All Time Classics of Charlie Chaplin

Sunday, March 9th at 2:00 & 4:00

"Monsieur Verdoux"

next attractions:

"City Lights"
"A King in New York"



Varscona Theatre

Shakespearean Film Festival

- Taming of the Shrew - Elizabeth Taylor - Richard Burton
March 7th & 8th at 7:00 & 9:00
- Hamlet
March 9th at 2:00, 7:00 & 9:00
- MacBeth
March 10th & 11th at 7:00 & 9:25
- King Lear
March 12th & 13th at 7:00 & 9:25

LIV ULLMAN



National Society of Film Critics
Best Picture
Best Screenplay - Ingmar Bergman
Best Actress - Liv Ullman
Best Supporting Actress - Bibi Anderson

Ingmar Bergman's
SCENES FROM A MARRIAGE

Starts Friday

Odeon 1

The Scientist working for you

In England not much more than 100 years ago when the word "scientist" was coined, its use was condemned as "North American vulgarism."

Fortunately for us all and for the lifestyles which we take for granted both the word and the individual who personifies the "today" definition of scientist are valid and vital.

Now, the scientist is one versed in science and devoted to scientific study and investigation.

This open house provides the opportunity for you to meet scientists whether they be those of international stature in a specific scientific discipline, the researcher-teacher, the senior student exploring and advancing in his chosen field, or the junior student just discovering the excitement of a virtually infinite horizon of knowledge and experimentation open to him.

It will also give you the chance to see what the scientist is doing and how he is doing it again from the researcher-teacher-student point of view.

And, in many areas you will have

the opportunity to take part in the displays or experiments being conducted.

While three major teaching areas faculties are being featured at the open house, you will discover that the future of science and the potential of its work is almost limitless.

A book on science written for the layman to understand and enjoy and published in 1958 bragged about the great accomplishments of men in science and the spectacle of Sputnik, the Russian satellite which had been launched the year before.

The growth rate of scientific knowledge it doubles every 10 years and sees 2,000,000 items published each year amounts to an information explosion.

The result of this knowledge and more importantly the use to which it has been put has made remarkable changes in the way we live.

Scientists at the University of Alberta today are working to further improve the world in which we live and to solve the problems we have created for ourselves.

That research might relate to:

- studies on air or water pollution;
- the protection of the landscape due to resources exploration in the far North;
- the development of more productive and profitable strains of grain;
- the testing of the components that make up our buildings;

- experimentation to increase the economy of tar sands extraction;
- the discovery that microbes may be able to control oil spills;

- the analysis of the safety of our food supply and studies to reduce its perishability and increase its nutritional value;

- studies on noise in industry and how to reduce and control it;

- impact studies on hockey helmets;

- research to increase per-acre food production;

- detailed study of that pesky mosquito and how to safely control it;

- continued research into the study of antibiotics;

- study into improving methods of handling and treating sewage in our "throw-away" society;

- the study of wildlife disease and the possible effects on humans;
- work looking at color and how it effects our lives, either as how we see and remember it or how we react to it in buildings and how it effects us at work;
- improvement of cooking oils and their cholesterol content;

- investigations to discover which plants, trees and shrubs will or will not grow in the Northern Alberta climate....

to name just a few of the current projects at the University of Alberta which will directly influence our futures, whether as individuals, families, communities, regions, countries or the world.

The scientists, the students and the staff of the university BUT ESPECIALLY THOSE IN THE FACULTIES OF AGRICULTURE AND FORESTRY, ENGINEERING AND SCIENCE WELCOME YOU TO VISIT, EXPLORE, WATCH, TAKE PART AND ASK QUESTIONS AT THE DISPLAYS THROUGHOUT THEIR FACULTIES.

ABOVE ALL, HAVE A GOOD DAY, AND ENJOY YOURSELVES!

There is no greater joy....

The Gateway

than the joy of discovery.
- Gunning

VOL. LXV, NO. 44. THE GATEWAY OPEN HOUSE SPECIAL ISSUE

THURSDAY, MARCH 6, 1975. TWELVE PAGES.

Counselling display good starting point

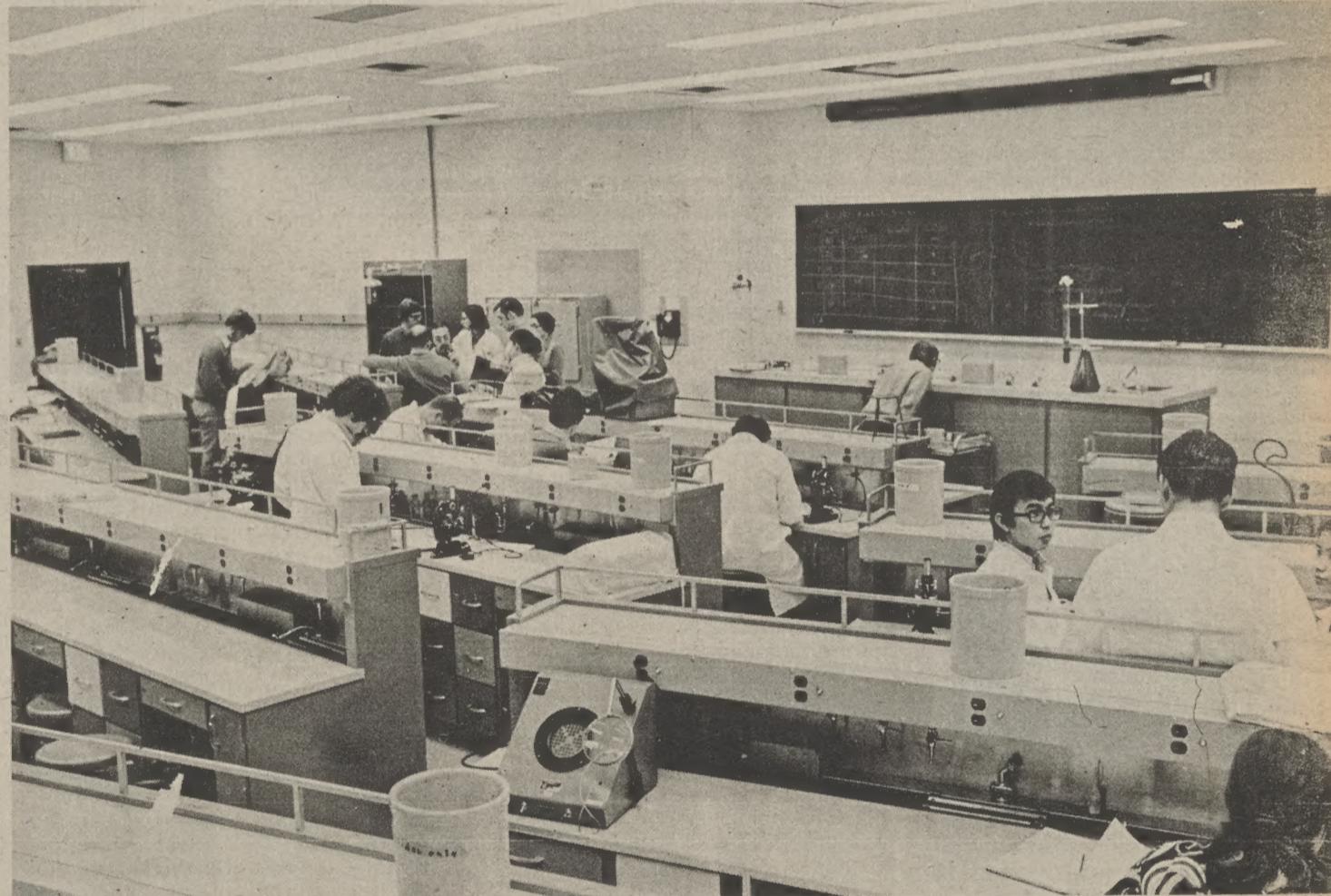
There's a lot of ways a prospective student can become confused and misled at a university, and it's much easier for a person who isn't quite sure what he or she wants out of a university to become disillusioned with it.

An information centre aimed mainly at helping prospective students understand how the university system works has been set up in the main concourse of the Central Academic Building (CAB 10 on the centrefold map) featuring a slide-sound display as well as representatives from the university's High School Liaison Committee.

There you can learn admission requirements for different areas of study, registration procedures, as well as obtain sound advice on different programs of study offered by the university.

Brian Silzer, high school liaison officer, says the display is part of an ongoing program to project the university to the high schools in order to solve as many individual problems as possible before they arise. Information will be given at the display to help people decide what would be best for them to see at the open house this weekend, (you can't possibly see it all) in addition to the regular types of services the committee provides.

"It might be a good place for a person to start at the open house," says Silzer, "a person would be most likely to see the parts that would be most interesting to him personally."



The university laboratory systems offer facilities for both basic experimentation in undergraduate programs, to advanced study and research in all areas of scientific endeavor.

Oh Yeah?

A dictionary of contemporary North American usage of the English language published in the late 1950's includes a definition which no doubt will be challenged by all of your Open House hosts and hostesses.

It claims that science is knowledge and that art is action.

Your hosts and hostesses today

will state that science today is both knowledge and action ... and much more!

It's imagination, the joy of discovery, enthusiasm, ingenuity, curiosity, thoroughness, care and precision, hard work, fun and sometimes just plain good luck.

INSIDE THIS ISSUE

Lost? The centre fold map can help. pages 6, 7

Agriculture display listings.....	page 3
Engineering display listings.....	page 4
Science display listings.....	page 5
Displays related to animal research	page 3
Energy for society's wheels	page 4
The vegetable kingdom.....	page 5
Hungry?.....	page 8

A greeting from the President

President Harry Gunning, although relatively new to the position, has already made inroads in the difficult task of showing society the essence of the university.

His primary goal is to have the university become increasingly meaningful to those people whom it serves. "This is obviously a very complex, multi-faceted objective which to fully understand requires a deep knowledge of universities and the many publics with which they can productively interact."

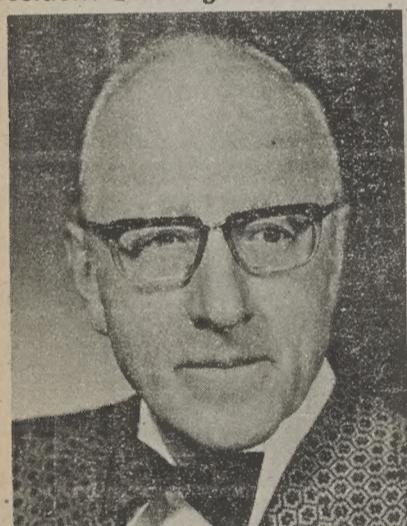
"Perhaps the University of Alberta cannot be all things to all people. But it certainly can be more things to more people."

Among the groups for whom he would like to see the university become increasingly more important, Dr. Gunning lists students and alumni, the academic and non-academic staff, the provincial government which directly supports the university and "the many publics with whom associations would be mutually beneficial."

Dr. Gunning emphasizes that "the public does not understand that the university is not a teaching institution but a learning institution. Our purpose is to stimulate others to learn for themselves."

His own learning encompasses a wide range of subjects and issues. He is a world renowned chemist who attained that status by graduating from the University of Toronto with a doctorate in physical chemistry; attending Harvard University for a year as a post-doctoral fellow; working for the National Research Council in Ottawa for three years; and serving as chairman of the University of Alberta's chemistry department from 1957 to 1974.

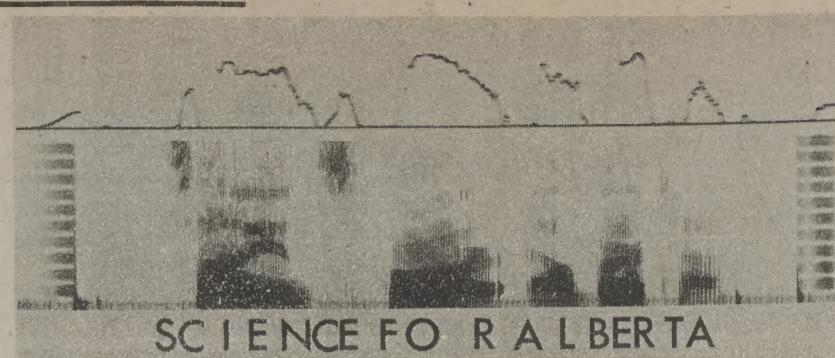
President Gunning.



There is no greater joy than the joy of discovery: that lasting satisfaction which comes from being uniquely responsible for contributing to the depth of understanding and the welfare of mankind. This is what Science is all about, and in our OPEN HOUSE we have taken great pains to show you the vast range of methods we use as scientists to penetrate the yet-unknown. We hope that you will catch the fire of our enthusiasm, and join the ranks of those who have been responsible for some of the noblest creations of the human mind.

Our Faculties of Agriculture and Forestry, Engineering and Science represent, in their dedication to the solution of the complex scientific and technological problems which beset our society, that which constitutes a great university. Give us your undivided attention, and you may find that a new sense of purpose will enrich your life.

**HARRY E. GUNNING
PRESIDENT**



Science films to show in "V" Theatres

Have you heard about what the hermit crab and sea anemone do deep down sea level? Well, they sort of "live together".

In fact, the pair appear to have worked out a definite and probably beneficial relationship, according to Professor D.M. Ross, dean of the Faculty of Science at the University of Alberta.

Dr. Ross has studied the creatures and found that they are often "strongly attached" to each other.

Sometimes, the sea anemone, a cylinder-shaped animal that looks like a flower, takes the initiative, climbing onto the crab's shell without any help.

On other occasions, the crab coaxes the sea anemone, rubbing and tickling it until it lets go of the shell or stone to which it clings.

Then, in an action possibly equivalent to 'carrying the bride over the threshold', the crab lifts the sea anemone onto its shell, where the sea anemone takes hold and makes its home.

This and other unique relationships between animals of "married species", - that is, animals of different species that live together - is the subject of a film that will be shown in the Physics Amphitheatre, P-126 (building 14 on the centre fold map), on the hour, every hour, between 10 a.m. and 4 p.m.

The 35-minute, 16 mm. color film produced by Dr. Ross has won several international awards, including the Bronze Bucranium at the International Festival of Scientific and Educational Films at Padua University in Italy.

The film has also been shown at the Annual "Conversazione" of the Royal Society of London and to the Emperor of Japan, also a noted marine biologist.

Besides the Ross' production, 19 other films averaging 20 minutes in length will be shown in three amphitheatres, V-120, V-124, and V-128, in the "V" Theatres area (13 on the centre fold map), covering many topics in geology, geography, biology, mathematics and other fields in science.

They will be shown between 10 a.m. and 4 p.m., giving you a chance

to sit down for a rest, quick snack and coffee.

In gathering data for the film, Dr. Ross took short leaves in Hawaii and Puerto Rico and a longer, sabbatical leave in Japan, New Caledonia, New Zealand, Italy and England.

He says that his film and laboratory experiments prove that by imitating the crab's "lifting" technique, through the use of rods or brushes, that sea anemones can be "persuaded" to release themselves and be placed on shells much as the crab does.

Dr. Ross also found that the crab can distinguish left and right and has some memory about the difference.

"If you give a hermit crab two sea anemones, he puts the first one on the left. But if you take the first one off the right shoulder before giving him the second anemone, he will still put the second one on the left."

Hermit crabs live in empty snail shells into which they withdraw to ward off attack by other creatures. They are usually safe from most predators when inside the shells.

Sea anemones are found usually on the shells of these large crabs, attached firmly by their pedal discs.

The spoken word ... taken for granted and used almost continuously each day. But have you ever taken a long hard look at the spoken word? If you've read this far, it's because you did take a look whether or not it was long and hard at the spoken word. That peculiar looking landscape? op? pop? art? cross-section? ... whatever you may call it ... is a voice print of the words unevenly spaced beneath the wiggles and squiggles. Visitors to the department of linguistics in Room 742 of the General Services Building No. 16 will have an opportunity to have their own voice print made and at the same time find out what goes on in a linguistics department which devotes itself exclusively to experimental linguistics. In addition to the experimental study of language as a product or a 'thing', linguistics research here is also devoted to analyzing what the human does with this special tool what mental and physical processes are used and how are they used—both the production and the perception of speech.

Numerous displays will show the work of the department and some of the complex equipment used to do that work, as well as course and career information. By the way, the heavy black patterns in the voice print above indicate the time-frequency variations in the various sounds of the words spoken while the mountain-like peaks and valleys along the top edge show the volume of each sound made by the speaker.

Not every day you get DIPPS or "hunt the Wumpus"

The open house visitor seeking variety of purpose would do well to drop in to the department of computing science. Only there can you see a digitized picture of yourself; only there can you see the instructional game "hunt the wumpus."

The digitized pictures come from DIPPS - the Digital Picture Processing System. Located in room 628 in the General Services Building number 16 on the centre fold map DIPPS will demonstrate the input, manipulation and output of pictures. The output of a TV camera is digitized and stored in the PDP-9 computer and the digitized picture can be manipulated by linear transformations on the gray levels, spatial transformations, and the detection of edges.

The pictures will be displayed on a 611 storage oscilloscope in either store or non-store mode. Output in the form of polaroid pictures will be provided.

In room 669 of General Services, you will encounter a midi-computer laboratory containing DEC PDP 11/45 and Nanodata QM1 computers. These machines are used for computer systems research but for open house they'll assume a "fun" image and demonstrate a variety of instructional games such as chess, blackjack, mao, and, of course, "hunt the wumpus."

To complete this scientific diversion, Alberta Research (Atmospheric Sciences) will make their "lunar lander" and other graphics programs available for inspection.

Understanding our minds

The nature of man has long been a subject for inquiry by scientists.

And at the Open House a number of displays will be concerned with investigations in this area. Two of the departments taking part are especially concerned in this area psychology and linguistics, both in the Faculty of Science.

The psychology displays, located in the Psychology Wing of the Biological Sciences Building 15e on the centre fold map will have a number of themes for their display.

The displays showing how psychologists study the world of color will deal with human detection of color, color memory and the relationship of color to mood and expectation. Visitors to the displays will have the opportunity to have their color memory tested.

Research into the self regulation

of brainwaves is helping psychologists to gain a new understanding of the relationships between mental and physical events, and of an organism's capacities for control of these events. Biofeedback training is becoming the preferred form of therapy for a number of mental and physical illnesses.

A video-tape presentation on teaching language to emotionally disturbed (autistic) children will be used to demonstrate how behavior change techniques, derived from experiments investigating how animals and humans learn, are used today in the treatment of behaviorally disturbed children. This presentation will show how these basic principals are being used by a local treatment agency, The Edmonton School for Autistic Children.

Although memory is usually

thought of as a unitary system, psychologists have now identified three types of memory systems. A display will answer questions regarding the relationship between the systems, the permanence of information in each, how information is lost, and how it might be better retained.

Another display will consist of two demonstrations: a demonstration of brain laterality on a member of the audience, and a demonstration of brain asymmetry in a video tape simulation of the performance of a split-brain subject.

The department of linguistics located in the General Services Building 16 on the map will have displays related to man's use of speech. Besides viewing the displays, visitors will have a chance to see a voice print made perhaps of their own voice.

Faculty of Agriculture & Forestry

The Faculty of Agriculture (under the name of College of Agriculture) was established in 1915. The first students to receive the Bachelor of Science in Agriculture degree (B.S.A.) graduated in 1918 while the present B.Sc. degree was first awarded in 1924.

A forestry program leading to the B.Sc. degree was started in 1970 and the initial group of students enrolled in the program began studies in the fall term of the 1970-71 academic year. The first degrees in Forestry were granted in April, 1974.

The professional programs in Agriculture and Forestry are four years in length and provide education

in numerous facets of the science of agriculture and forestry. The faculty is directly responsible for the administration of the departments of agriculture economics and rural sociology, agricultural engineering, animal science, entomology, food science, forest science, plant science, and soil science.

Many of the courses pertaining to the science of agriculture and forestry are taught in other departments of the university since the underlying scientific principles are similar to those in other fields. The departments in the Faculty of Agriculture and Forestry apply these principles to find solutions to current

problems and participate in research work to seek new information.

Graduates of the faculty are involved in teaching, research, extension, and administrative work related to agriculture production, marketing, and processing; in the manufacture and distribution of such essentials as feeds, fertilizers, and machinery; in the handling of agricultural products; and in farming.

Forestry graduates are presented with employment opportunities with the federal and provincial governments and with industries associated with the production and marketing of forest products.

Food science department studies food processing

How often have you missed the most spectacular view in miles because you weren't aware that it was only 200 yards off the main highway behind a bluff of trees?

While not claiming to be the most spectacular view in miles, the department of food science is slightly off the beaten path for visitors to the open house.

But the slight detour to the South Lab number 11 on your map will introduce you to an interdisciplinary aspect of a specialized science: food processing, something of concern to us all.

There will be continuous demonstrations of the freeze-drying, the vacuum evaporation of fruit juice and the manufacture of cottage cheese in food processing pilot plants.

In addition, special displays showing the utilization of cheese when in various foods and of new products developed from soybean protein will be on exhibit. Visitors will be taken on guided tours of the laboratory facilities and questions will be answered.

As well, a film "Science of Survival" on careers in food science will be shown every hour, on the hour, in Room 229, South Lab Number 11.



Mosquito head magnified

AGRICULTURE & FORESTRY

ANIMAL SCIENCE

1) Animal Physiology

Genetics, nutrition and biochemistry
General Section on Functions &
Size of Department

PLANT SCIENCE

1) Horticulture

2) Plant Breeding

3) Plant Pathology

4) Plant Physiology & Biochemistry Ethylene

5) Range & Pasture Research

6) Weeds: Wants and Waste.

AGRICULTURE ENGINEERING

1) Irrigation & Drainage

2) Farm Buildings - Design

- Environmental
Control

- Manure Management

3) Safety & Work Science

FOREST SCIENCE

1) General Forestry Option

2) Forest Management

3) Forest Soils

4) Forest Hydrology

5) Forest Recreation Option

6) Grazing Option

7) Student Participation

ENTOMOLOGY

1) Insect Sculpture

2) Scientific Publication

3) Areas of Specialization in Entomology

4) Insect Biochemistry

5) Aspects of Entomology

SOIL SCIENCE

1) What does a Soil Scientist do? (slides)

2) What does a soils lab get used for?

3) What is remote sensing?

4) Heavy Metal Pollution of the soil.

FOOD SCIENCE

1) Lab Facilities

2) Film "Science of Survival"

FACULTY OF AGRICULTURE AND FORESTRY

1) Entrance Requirements

2) Pre-Veterinary Medicine

3) Agronomy Display

4) Grazing Management Program

AGRICULTURAL ECONOMICS

1) Farm Management and Production Economics

2) Agricultural Marketing

3) Land Use Competition and Forestry Economics

4) Agricultural Ec. in International Devel.

5) Rural Sociology (Social Issues and Change)

Ag. Bldg., 9 - Rm. 245
Room 245

Ag. Bldg., 9 - Rm. 327, Rm 342

Chem./ Min. Bldg. 3 - Rm. 244

Rm. 244
Rm. 244

Chem./ Min. Bldg. 3-Rm. 768

Rm. 752

Rm. 723

Rm. 723

Rm. 752

Rm. 723

Rm. 741

Rm. 741

Rm. 244

Rm. 244

Ag. Bldg. 3 - Rm. 275

Rm. 272

Rm. 269

Rm. 241

Rm. 263

Ag. Bldg. 9 - Rm. 240

Rm. 210

Rm. 475

Rm. 460

South Lab. 11-Rm. 229

Ag. Bldg. 9 - Rm. 150

Rm. 150

Rm. 150

Rm. 150

Ag. Bldg. 9 - Rm. 155

Rm. 245

Rm. 345

Rm. 155



Dean

MacHardy

The open house theme "Scientists at work for you" is well suited to the background of the Dean of the Faculty of Agriculture and Forestry.

Dr. Fenton MacHardy, an agricultural engineer, is known for his work in the development of improved farm machinery and farm building design.

In 1966, for example, he built a model tractor which operated without a driver. The tractor, run by a remote control guidance system, could drive itself over a prearranged path and bring itself back to the path automatically if it were forced out of its way through unforeseen circumstances such as a collision between the machine and a large stone.

Information stored on a magnetic tape was fed into the tractor drive system, telling it the steps it was supposed to perform. In order to detect unexpected occurrences, Dr. MacHardy tested heat sensitive devices placed at two corners of the field. These devices which would home in on the tractor's exhaust pipe and relay a message to the computer which would carry out corrective procedures and return the tractor to the correct path should it go astray.

In the operation of automatic machines an operator would only be needed to handle special problems such as a tractor getting stuck in the mud.

A native of Vermilion, Dean MacHardy farmed there for several years. At one time he directed a research study to determine the optimum level of farm mechanization for the average Alberta farm. The study found the number of working days made available by the weather and then related this to the size of farm machinery required for a given farm size.

Dean MacHardy holds degrees from the University of Saskatchewan; Northwestern University in Evanston, Illinois; and the University of Edinburgh, Scotland.

Animal research for ecology

The initial reaction of open house visitors might be similar to that of the kid in the candy store that is an uncertainty of what to go after first.

However, increasing interest in the ecology situation as it pertains to animals should lead many visitors to the displays related to animal research whether they are in the department of zoology, animal science or even electrical engineering.

The zoology department is located in one wing of the Biological Sciences complex (15d on the centre fold map). A mixture of teaching and research displays, a tour through a typical vertebrate biology laboratory (zoology 326-second year course) featuring demonstrations of mammalian adaptations using live animals, counselling for prospective

students on "careers in zoology" and discussion with undergraduate and graduate students are the activities available to visitors to this department.

Six major zoology displays, located in Room M-145 of the Biological Sciences Centre represent research efforts of staff and graduate students. A prominent display illustrates the phenomenon of mammalian hibernation, an energy conserving strategy used by the local Richardson's ground squirrel (often called gopher) to survive Alberta's harsh winters.

Researchers in the department are actively studying the physiological adaptations associated with natural hibernation because of its potential contribution to understanding other areas in low

temperature physiology. These include artificial hibernation or temporary suspension of life and the preservation of organs, embryos and organisms.

The zoology museum (room number Z-1013) maintains a strong interest in the distribution of animals within Alberta and, under the direction of Wayne Roberts, will feature the animals of southeastern Alberta. Museum staff will discuss the zoogeographic and adaptive features of displayed vertebrates restricted to the arid or semi-arid life zones of southeastern Alberta.

The "behavior" group's display has the social organization of the Columbian ground squirrel as its theme. Social structures, seasonal changes in the behavior of males, females and young, and the influence

of scent marking on social organization will be demonstrated through the use of live animals and placards.

Brief descriptions of the social systems of five other species of ground squirrels along with live animal representatives of each species will be included.

The display was organized under the direction of Keith Kivett.

A unique graduate research program on movements of striped skunks using radio telemetry will utilize a "collared" live (but desiccated) skunk and the receiving unit. This project, directed by Ron Bjorge, will emphasize the cooperative efforts necessary to collect data for most zoology research projects, in this case those of the Alberta Department of Agriculture, Alberta

Continued on page 8.

Faculty of Engineering



Dean Ford

Dean George Ford, speaking as an engineer, once said that engineering training should provide a "liberal education" in the present technical age. An engineering education "should provide an excellent base for a bank manager, an insurance adjuster, service manager and so forth," he said.

Dean Ford, 54, has a keen interest in the oil sands issue and stresses that the engineering profession can play a major role, through universities and private enterprise, towards developing the technology to recover more of Alberta's oil sands and coal resources.

He is a member of an advisory science and engineering committee which hopes to participate in the defining of provincial government resource development policies.

The committee's intent, according to Dean Ford, is to map out a role for the engineering profession and the university in planning the development of Alberta's resources.

The dean has criticized engineering curriculums for putting too much stress upon technical education and too little on having students "learning to learn."

Society offers a world of "changing demands" where problems are not always clearly defined and scientific information is incomplete. Engineers must be able to adjust, he has said.

His own engineering education began at the University of Alberta in the '40's and continued at Stanford University, Stanford, California. After his return he was appointed an assistant professor of civil engineering in 1948, an associate professor in 1953 and professor of applied mechanics in 1957.

In 1959, the university established the department of mechanical engineering and Dr. Ford was appointed chairman and professor of mechanical engineering. He was appointed Dean, Faculty of Engineering, in 1971.

The Faculty of Applied Science (renamed Engineering in 1948) began operations in 1913. The first graduating class was in 1914 and included only seven graduands in civil engineering. From this modest beginning the faculty has expanded to include 1,280 full-time undergraduate students and 149 full-time graduate students.

Engineering graduates are engaged in careers in all Canadian provinces as well as in many parts of the western world. More than half of the membership in the Association of Professional Engineers, Geologists and Geophysicists of Alberta are graduates of the University of Alberta, and the total engineering membership of the body is very close

to the number of graduates from the Faculty of Engineering since its inception.

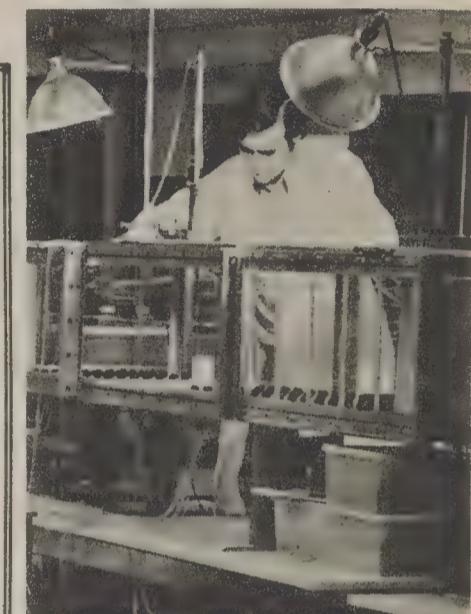
The faculty is made up of the departments of chemical, civil, electrical, mechanical and mineral engineering. The past few years have seen major changes in all curricula to adjust to the broadening scientific base and rapid development in sophistication of professional engineering practice.

Members of the teaching staff are actively engaged in research and are also concerned with maintaining contacts with advanced current engineering techniques. A prominent example of engineering research is the work of the late Dr. Karl Clark who worked for many

years in the department of mining and metallurgy, now incorporated with the division of petroleum engineering into the department of mineral engineering.

Early in his career he recognized the potential of the Athabasca Oil Sands and devoted the major portion of his research activities to the development of a solution to the problem of extracting oil from the sand. The result the hot water flotation process is being utilized today.

The Faculty of Engineering is aware of the need for a liberal education and offers courses in the areas of fundamental engineering, science, human relations, public relations, and communications.



Analyzing airflow patterns.

ENGINEERING

MINERAL ENGINEERING

Metal heat treating	Rm. No.	Chem/ Min 3, 108-110	136
Assaying of ores			
Mineral processing			
Metal fatigue testing		180	EB 540
Thermal properties of metals and non-metals		178	354
Field emission microscopy		174	450
Electron Microscopy		210	
Rock Mechanics		208	
Mineral Processing		304	
Metallic Corrosion		317	
Chemical analysis by X-ray and atomic absorption		672	
Structures of metals and alloys by microscopy		679	
Scanning electron microscopy		656	
Gas flow through drill cores		704	
Reservoir simulator for predicting oil and gas flow		712	EB 433
Melting and casting of metals and alloys		717	EB 458
Mechanical properties measurements		774	EB 451
X-ray diffraction			553
Properties of tar sands			

MECHANICAL ENGINEERING

Clothing heat losses	Rm. 1-10	Electromechanical oscillator	136
Solar heating		Strength tester	
Fatigue life testing		Wound rotor induction motor test	
Cyclic loading of nylon rope		Primitive induction motor	
High frequency fatigue of welded joints		Power network analyzer	
400,000 pound testing machine		Holographic displays	
Impact testing of hockey helmets		Laser communication	
Vibration isolation		CO2 laser	
Electrodynamic shaker systems		Microwave technology	
Air track demonstration		Laser plasma fusion studies	
"Road" testing		Laser induced gas breakdown	
Air pollution by engine exhaust		Organ preservation studies	
Gas and steam turbines		Microwave heating	
Teaching engineering design		Dielectric measurements	
Industrial engineering		Simulation of an automobile suspension system	
Numerically controlled nulling machine		Bicycle ergometer	
Thermosiphon for ice dams		Closed loop motor control demonstration	
Ice formation		Wildlife tracking (Telemetry)	
Arctic engineering		Computer simulation of rocket launch	
Photoelastic stress analysis		Radio Astronomy (slide show)	251
Lubrication research			
Noise control demonstration			
Hearing tests			
Wind tunnel			
Traffic noise			
Interferometer for heat transfer			
Water channel visualization of wind			
Frost tunnel			
Low temperature testing			
Electrical engineering			
Electric arc discharges			
Electric "WIND"			
Small JACOBS LADDER			

Chem/ Min Bldg.	274	CIVIL ENGINEERING	7
Stirred Tank Heater		Hydraulics Engineering Lab:	
Control of heat transfer process		Thermal pollution	
Computer controlled distillation column		Mobile boundary hydraulics	
Liquid level control		Laser doppler velocity	
Chemical Reactor experiment		Laser transit and communicator	
Evaluation of energy resources		Orthophoto mapping	
Sulfur Recovery		Structural Engineering Lab:	
Used in natural gas processing		Big testing machine	
Infrared Spectroscopy		Joist specimens	
Catalysis research		Prestressed concrete beams	
Pressure losses in fittings		Steel specimens	
Lunar Landing Simulator		Timber	
Process operator's console		Test relating to tall buildings	
Hybrid computer		Geotechnical Group Displays:	
What are you (really) drinking?		Frank Slide studies	
Natural gas processing		Pit slope analysis	
Hydrate formation		Earth-filled dams	
Solubility studies		Tar sands research	

Rm. 2-1	356	CHEMICAL ENGINEERING	
Rm. 2-3	364	Stirred Tank Heater	
Rm. 2-9	359	Control of heat transfer process	
Rm. 2-11	475	Computer controlled distillation column	
Rm. 2-14	428	Liquid level control	
Rm. 3-31	456	Chemical Reactor experiment	
Rm. 4-37	813	Evaluation of energy resources	
Rm. 5-23		Sulfur Recovery	
Rm. 6-23		Used in natural gas processing	
Main Eng. Bldg.		Infrared Spectroscopy	
EB-B53		Catalysis research	

Chem/ Min Bldg.

oil towards producing oil wells.

In Room 1-10 of the Mechanical Engineering Building 9 on the centre fold map another group of engineers will be on hand to reveal a contribution they make to the oil industry. Their display shows how mechanical engineers do fatigue testing of oil well components in corrosive situations.

The university's department of mineral engineering has a petroleum reservoir simulator which is used for just this purpose. Located in Room 656 of the Chemistry/Mineral Building 3 on the centre fold map this apparatus shows, with vivid contrast, the patterns made in an underground oil reservoir when a fluid such as water is used to enhance the recovery by pushing the

Continued on page 8.

Energy for society's wheels

Energy. Most people used to think of it in terms of something supplied by their favourite breakfast cereal.

Now the term is more apt to be used in reference to a power source to keep the wheels of society moving. With conventional fossil fuel sources fast becoming depleted and as energy bills rise, the search for greater efficiency in the production and use of conventional sources and for alternate sources takes on new meaning. Energy becomes a topic of interest to everyone.

This is particularly true in Alberta "Canada's energy province." And, as Alberta's largest post-secondary educational and research institution, the University of Alberta is naturally involved in a great deal of energy research.

The research is of a wide variety. It ranges from a study of the way heavy water is produced for Canada's nuclear power plants. It also deals with some of the unpleasant by-products of society's immense appetite for energy.

In room 1-22 of the east wing of the Chemistry Building—12 on the centre fold map a physical chemistry display will be devoted to three energy-related experiments. One demonstrates the extraction of bitumen from the Athabasca Tar Sands on a laboratory scale. Another experiment demonstrates the extraction by a method suitable to be undertaken on an industrial scale. A third shows a further step in the processing of the bitumen extracted from the tar sands its separation into fractions.

Oil wells drilled into a petroleum reservoir remove only that oil that is easy and therefore commercially profitable to remove. As the price paid for crude rises it becomes commercially profitable to remove more oil. This is done by a number of "enhanced recovery" techniques. By improving these techniques the extraction efficiency of Alberta's oil reservoirs can be increased.

The university's department of mineral engineering has a petroleum reservoir simulator which is used for just this purpose. Located in Room 656 of the Chemistry/Mineral Building 3 on the centre fold map this apparatus shows, with vivid contrast, the patterns made in an underground oil reservoir when a fluid such as water is used to enhance the recovery by pushing the

Faculty of Science

The Faculty of Arts and Science was created in 1908, making it the oldest faculty at the University of Alberta. Classes began at Queen Alexandra School with an enrolment of 45 students which included four graduate students in physics. The following year, instruction was offered at Strathcona High School and the first on-campus classes began at Athabasca Hall in the summer in 1911.

The combined Faculty of Arts and Science developed into the largest at the university and in 1963 the two were divided into separate faculties.

Science instruction in mathematics, chemistry, and physics began in 1908 but the development

of the scientific disciplines was slowed by the First World War and it was not until 1921 that the number of academic staff in the science departments reached 25, a figure which remained constant until 1946.

The faculty offers three main types of programs leading to the degree of Bachelor of Science: four-year honors program; four-year programs with specialization; and three-year general programs.

The honors programs are designed essentially for students who are interested in careers in scientific research. They provide preparation for admission to graduate studies, to a Master of Science program or even to a Doctor

of Philosophy program.

The general programs provide a general education with a scientific emphasis for students who want careers in business, teaching, medicine, dentistry and so on.

The four-year programs with specialization try to bridge the gap between the three-year programs and the honors programs. They can provide the background necessary for admission to Graduate Studies in some cases, and in any event do permit the attainment of a professional status.

In many cases the transfer from one program to another can be arranged to suit changing ambitions, needs, or academic qualifications.



Books galore

The University of Alberta Bookstore, located in the Students' Union Building, (17 on centre fold map), will be open from 10 a.m. to 3 p.m. on Saturday, March 8th, Open House day.

Occupying approximately 25,000 square feet on the lower and main levels of the building, it offers a wide range of supplies for students. The spacious area furnishes university texts, recreational reading, trade books and paperbacks to its buyers.

It's the second largest university bookstore in Canada. At peak periods during the winter session, the stock of books totals more than 40,000 titles.

University-crested material ranging from pins and rings, to mugs and sports equipment meet the demand of the students. Records, magazines, posters, cards, and stationery, art and athletic supplies are sold and a variety of novelty items are also available on the main floor of the Bookstore. The lower level houses the rows of books shelved according to subject, and a small, but comfortable, reading and lounging area.

If you can't pry yourself away from Open House displays, why not come browse another time. It's open to the public. From September until April, regular weekly hours are 9 a.m. to 5 p.m. Monday to Friday and 10 a.m. to 1 p.m. on Saturday.

Electron Microscopy

Since the development of the electron microscope three decades ago great advances have been made in our understanding of the function and structure of cells and cellular components in biological research.

Visitors - in small groups - the electron microscope lab in Room CW-225 (centre wing of Biological Sciences - 15 on your map) will be able to see a demonstration of how material is prepared for observation as well as seeing the microscope in action.

SCIENCE		
CHEMISTRY		
1) Analytical Chemistry	Chem East 12	1-48
2) Inorganic Chemistry		1-40
3) Organic Chemistry		1-26
4) Physical Chemistry		1-22
5) Glassblowing		1-60
6) Modern Mass Spectrometry	Bsmt.-38	
COMPUTING SCIENCE		
1) Digital Picture Processing System	Gen. Ser. 16, Rm. 628	
2) Computers		Rm. 669
LINGUISTICS		
1) Psychoacoustics Lab.	Gen. Ser. 16, Rm. 750	
2) Phonetics Lab.		Rm. 751A
3) Computer Room		Rm. 746
GEOGRAPHY		
1) Climate in Caves	BioSci. 15A, M151	
2) Ecology		M141
3) Soil Erosion in Badlands		M141
4) Lake Sediments		M141
5) Mapping		M141
6) Meteorology - weather, climate		M141
PSYCHOLOGY		
1) Color Display	Psych. 15E, 102	
2) Self Regulation of Brain Waves		120A
3) Teaching Languages to disabled Children		126
4) Human Learning and Memory Display		116
5) Physiological Display		121
6) Films & Gen. Display		113
7) Slides of Selected Topics in Psychology		104
MICROBIOLOGY		
1) Antibiotic Resistance	BioSci. 15A, M-245	
2) Antibiotic Production		M245
3) Sewage Treatment		M245
4) Fish & Wildlife Diseases		M245
5) Microbial growth on crude oil		M245
GEOLOGY		
1) Museum	Bsmt. Ag. Bldg. 9	
2) Aerial Photography	1st flr. W. wing	
3) Petroleum Geology	1st flr. W. wing	
4) Ore Deposits	1st flr. W. wing	
5) "Rock Show"	1st floor	
BOTANY		
1) Alberta Ecological Survey	BioSci. 15A, M123 & Foyer	
2) Botanical Garden and Friends of the Garden		Foyer-Main 2nd flr.
3) Greenhouses		6th flr.
4) Electron Microscope Lab.		CW-225
5) Displays		M-149
6) Class Room for Plant Physiology		CW-437
7) Class Room Demonstration for elementary students in biology		CW-210
8) Counselling Service		M-130A
MATHEMATICS		
1) Videotapes	CAB 10, Main Flr.	
2) Films	BioSci. 15	
3) Instant Insanity	CAB, Main Flr.	
4) Probability	CAB 331	
5) Information booth	CAB Main Flr.	
6) Others		
PHYSICS		
1) Teaching display	Physics 14, Main flr.	
2) Modern methods in Geographical Explorations		Main flr.
3) Earthquake displays		6th flr.
4) Luminescence, Lasers & Strange properties of Light		6th flr.
5) Earth Magnetism		6th flr.
6) Astronomy and Astro-physics		6th flr.
7) Physics of very cold climate		6th flr.
8) Ancient variations in climate		6th flr.
GENETICS		
1) Cultural responses to major environment changes	BioSci. 15A, M.137	
2) Plant Cell Culture		M.137
3) Genetic Studies in Multicelled Organisms		M.137
4) Small Group Tours	C. W. 5th flr. W.	
5) Genetic Improvements of Cultivated Crops		M.137
6) Student Career Counselling	CW, Rm. M130A	
ZOOLOGY		
1) Typical senior course in Zoology	BioSci. 15D, Z-305	
2) Mammalian Hibernation		M.145
3) Animals of S.E. Alberta		Z-1011
4) Animal Behavior		M-145
5) Wildlife Parasitology		M-145
6) Marine Invertebrate behavior	V-Theatres 13	
7) "Parasites on Moose" Video tape	CW-4th flr.	

Dean Ross

The Dean of Science at the University of Alberta is the producer of a film that was awarded a prize at the Italian Film Festival in 1972. The Emperor of Japan requested a print of the film and what he saw can be seen by open house visitors as the film will be projected every hour on the hour in the V-wing of Physics.

Dr. Donald Ross, Dean of the Faculty of Science is a zoologist and a leader in the study of the behavior of marine vertebrates. His years of research activities led him to produce the award winning 40-minute film dealing with the relationships formed by some of these water animals.

Dean Ross is noted for establishing a good balance between research activities and the many administrative duties which his position entails. Time is a strong indicator of his decision-making capacity. He has been Dean of the Faculty of Science since 1964, a departure from the five-year limit self-imposed by most Deans.

Dean Ross, who earned his PhD at Cambridge University, has 12 departments to look after, the highest number in the Faculty's history. The housing of these departments, which includes the recent construction of a new chemistry building and a new biological sciences building, constitutes one of his larger contributions to the university. And, as a member of the university's Board of Governors, he is actively engaged in implementing other beneficial policies.

X's and O's

Visitors to Chemical Engineering Chemical/Mineral Engineering, No. 3 on map will have a chance to test their skill against a computer in games such as X's and O's and nim in room 475. Undergraduate students will demonstrate experiments which are part of their engineering course program.

Plant research - variety

A Plant ... what does it mean to you?

At first glance or thought probably not very much.

It's the second glance or second thought that really makes it impressive.

While standard dictionary definitions run something like "an organism of the vegetable kingdom, characteristically having cellulose walls etc."

A plant is much more than that it's the basis for the world's food supply, it supplies us with paper and many building products, it beautifies and protects our landscape, over millions of years it has become our major source of fuel and energy and exhibits at this open house will give you a glimpse at the vital role they play in our lives.

Exhibits of the department of plant science in the Faculty of Agriculture and Forestry all located in the Agriculture building, number 9 on your map will be located in rooms 327 and 341.

Illustrations of the quantities of food produced per acre for vegetable compared to field crops will be featured as well as studies examining the potential of potatoes to complement or substitute for wheat, flour and other cereal products.

By the genetic manipulation of certain plants great improvements in the quality, productiveness and hardness of crops have already been achieved. Plant breeding continues this work and through knowledge of botany, genetics, plant physiology, biochemistry, statistics and farm practice enables the plant breeder to

produce new varieties more acceptable and useful to both the consumer and the producer.

Plant pathology examines plant diseases, their causes, symptoms and methods used in developing controls and cures.

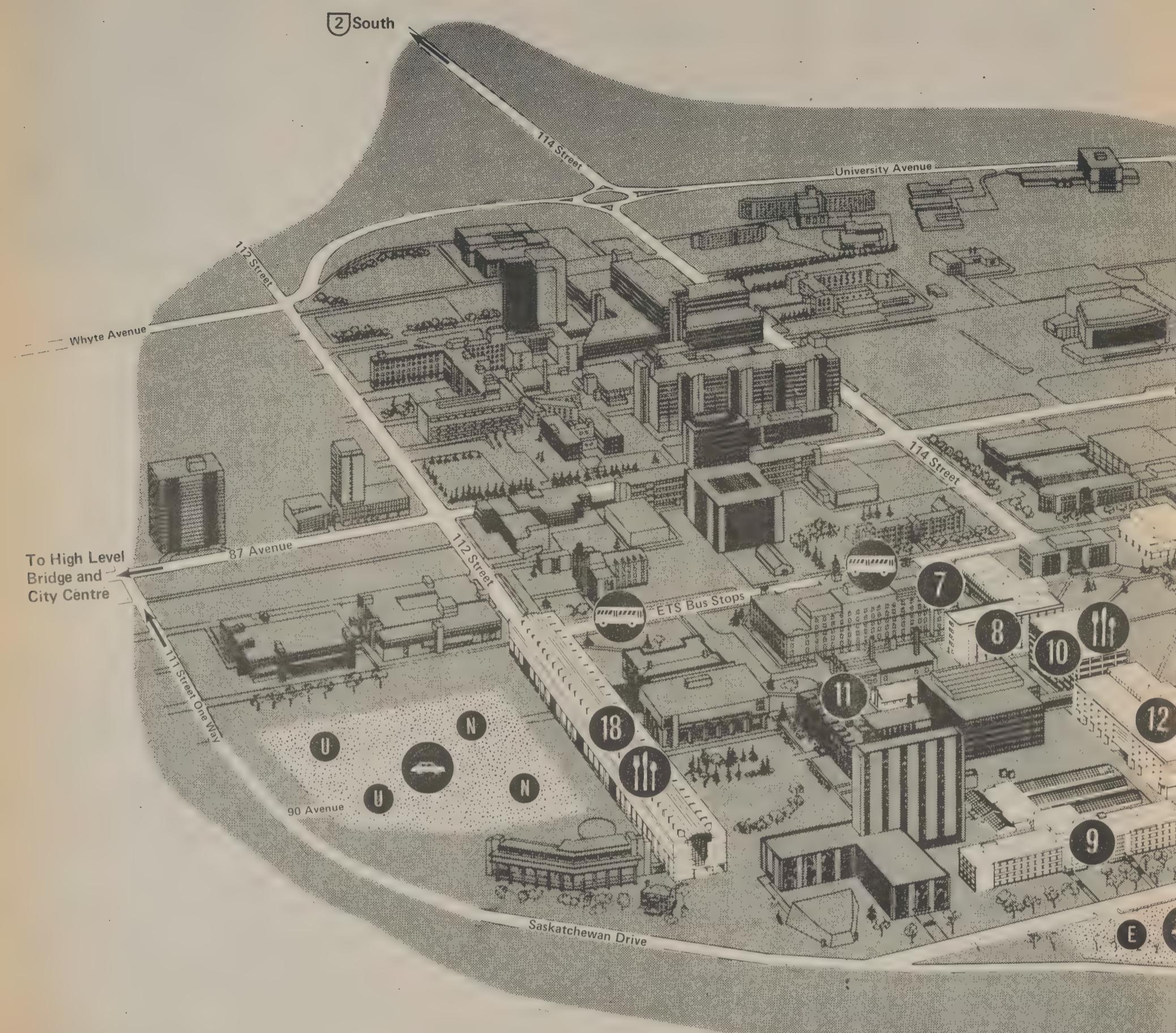
Other displays will show how simple ethylene is produced by fruits, leaves and other plant parts a hormonal factor which effects plants in such ways as the aging and falling of leaves and the ripening of fruit and the effects of ethylene on plants and plants parts.

Other displays will show the chlorophyll effects in mutations of barley; the effects of various kinds of field management resulting in varying productiveness of pastures in this region with a view to increase animal yield economically.

And, of course, our pesky friend the weed will not be overlooked.

Displays will show how they can interfere with crop growth and illustrate how they can have an "edge" over what we really want to grow; how they "cost" us economically and how they can even threaten human welfare in recreational activities, sewage disposal, and the loss of quality of our lakes.

Agriculture Engineering exhibits will show some aspects of farm and forest mechanization as well as illustrating the importance and improvements being made in irrigation and drainage; also the importance of farm buildings, their design, environmental control and the management of manure.



- 1 Stadium Car Park
- 2 Windsor Car Park
- 3 Chemical/Mineral Engineering
- 4 Mechanical Engineering
- 5 Structural Engineering Laboratory

- 6 Hydraulics Laboratory
- 7 Civil Engineering
- 8 Electrical Engineering
- 9 Agriculture
- 10 Central Academic Building

- 11 South Laboratory
- 12 Chemistry Centre
- 13 "V" Theatre
- 14 Physics
- 15 Biological Sciences

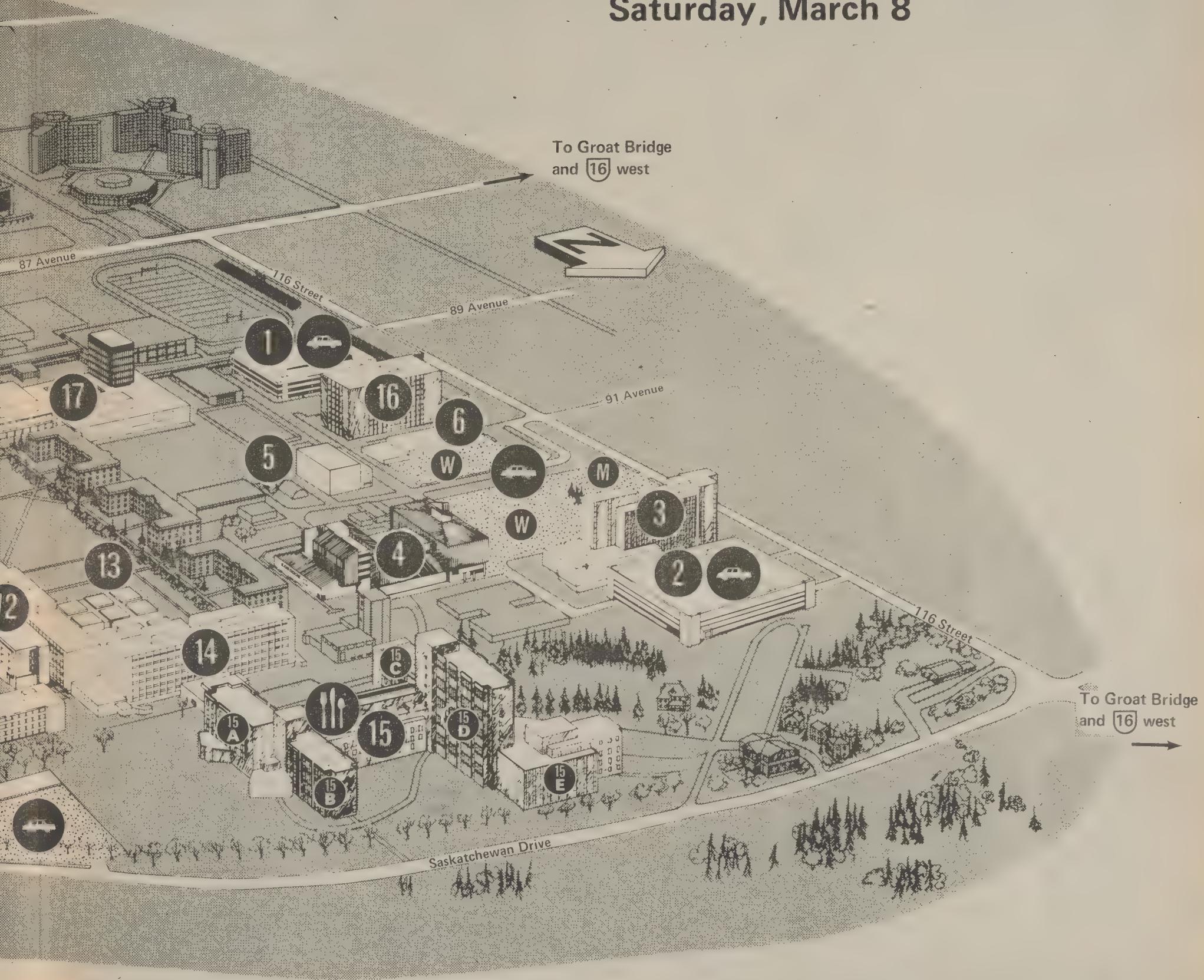
Agriculture Economics and Rural Sociology - Agriculture 9
Agriculture Engineering - Chemical/Mineral Engineering 3
Animal Science - Agriculture 9
Botany - Biological Sciences 15B
Chemical Engineering - Chemical/Mineral Engineering 3
Chemistry - Chemistry 12
Civil Engineering - Civil Hydraulics and Structural Laboratories 5
Computing Science - General Services 16

Electrical Engineering
Entomology - Agriculture
Food Science - South
Forest Science - Chemistry
Genetics - Biological Sciences
Geography - Biological Sciences
Geology - Agriculture
Linguistics - General Services
Mathematics - Central Academic Building

OPEN HOUSE '75 LOCATION MAP

The University of Alberta

Saturday, March 8



15 A Microbiology
 15 B Botany
 15 C Genetics
 15 D Zoology
 15 E Psychology

16 General Services
 17 Students' Union (SUB)
 18 Students' Union Housing (HUB)
 Food  ETS Bus Stops 

1 M
 2 U
 3 N
 4 E
 5 W

Parking Areas

Map Prepared by Graphics Division, Technical Services

- Electrical Engineering 8
 - Agriculture 9
 - South Laboratory 11
 - Chemical/Mineral Engineering 3
 - Biological Sciences 15C
 - Geological Sciences 15A
 - Agriculture 9
 - General Services 16
 - Central Academic 10

Mechanical Engineering - Mechanical Engineering 7
 Microbiology - Biological Sciences 15A
 Mineral Engineering - Chemical/Mineral Engineering 3
 Physics - Physics 14
 Plant Science - Agriculture 9
 Psychology - Biological Sciences 15E
 Soil Science - Agriculture 9
 Zoology - Biological Sciences 15D

ANIMALS, from page 3.

Fish and Wildlife and the University of Alberta department of electrical engineering.

Wildlife parasitology will be represented by a placard, microscope, color slide-tape presentation dealing with studies of parasites of selected wild ungulates (hoofed mammals) and carnivores of Alberta.

An example of techniques used to recover parasites and a placard, slide-tape program on the diseased mange which is common in wolves, coyotes and foxes will be featured. The co-ordinator for the display is Dr. W.M. Samuel.

A major display dealing with a typical senior course in zoology will be part of the building tour (in Room Z-305). It will include dissection demonstrations of representative vertebrates, 50-60 species of living vertebrates, particularly mammals dealing with adaptations. A veteran graduate teaching assistant and the technician in charge of the live animal collection will be present.

Students will be available to conduct specific tours outside the scheduled tour of zoology. In addition, staff will be on hand for discussion and counselling of prospective students.

A film on marine invertebrate behavior by Dr. Ross, Dean of the Faculty of Science, will be shown hourly in one of the V-wing theatres (13 on the centre fold map) and a video tape by Dr. Samuel on

"Parasites of Moose" will be shown in the Centre Wing on the fourth floor of the Biological Sciences Centre.

The department of animal science located in the Agriculture Building (9 on the centre fold map) will have displays centering on the many areas of research to which staff and graduate students apply themselves.

These displays will relate to wildlife, animal physiology, genetics, nutrition and biochemistry. There will also be a general section on the functions, size and history of the department.

For open house the department has two main themes: one will focus on the progress made in the breeding and nutrition of domestic animals and the other will show how a knowledge of physiology and biochemistry aid in maximizing the performance of domestic animals.

A special display in the Agriculture Building will explain how students can take their first two years towards a Doctor of Veterinary Medicine degree in the University of Alberta's Faculty of Agriculture and Forestry.

The animal aspect of open house even surfaces in the department of electrical engineering (8 on the centre fold map) where displays will show the use of miniaturized radio transmitters for wildlife tracking and organ preservation studies being carried out in bio-medical engineering.



Wildlife research, both within and without the natural habitat is done by the U of A.

PLANTS, from page 5.

These exhibits will be located in Room 244 of the Chemical/Mineral Engineering Building number 3 on the map and it is recommended you enter by the southwest front door.

A special display on livestock grazing programs will be featured in room 150 of the Agriculture building number 9 which will show pictures of students on field trips, employment opportunities, and a visual explanation of the program. Students and staff will be on hand to answer questions.

Plants by and large don't accomplish much unless they have something to sink their roots into: most commonly known as soil.

Soil scientists located in the Agriculture Building, number 9 through a slide demonstration will explain their research in room 240. Alternating with the slides, an Alberta-made film will examine the soils of the province and why their conservation is essential.

In Room 210 you will be able to visit a soil lab and see soils tested with fertilizers, their textures examined, the study of how bacteria and fungus grow in soil, the effects of fertilizers on our lawns, how the soil temperatures are measured and how oil-polluted soils can be reclaimed.

Cameras and satellites used to study soil?

Sounds incongruous but cameras at 5,000 feet and satellites at 500 miles have been required to put together Canada's land inventory.

In Ag Room 475 you will be able to see the resulting maps of this area rating your soil for agriculture and for forestry.

In Ag Room 460 there will be a demonstration of sophisticated and analytical equipment needed to measure and find out if there is serious metal pollution in our soils. The detection and the amounts of such elements as lead and cadmium and sewage sludge will be demonstrated to visitors.

The forest which provides so much recreational enjoyment for us all also is one of Canada's major resources.

Displays of the five year old department of forest science in the Faculty of Agriculture will be in Chemical/Mineral Engineering Building number 3.

Characteristics and identification of tree species particularly those of the forests of Alberta will be featured in displays in Room 768. Forest management the measurement of forest resources as well as fire management, suppression and control will be shown in Room 752.

Studies of soil types and their effects on young trees as well as displays emphasizing the effects and importance of water in the forest will be featured in Room 723.

The recreational aspects of the forest will be featured in Room 752

while a display on grazing will be in Room 723.

A student orientation room admission standards, program information, career counselling etc. will be located in Room 741.

Somehow, plants and civil engineers don't seem to have much in common.

But thanks to the civil engineers we now know more about the strength of timber columns used in various types of construction. Hourly, on a large stress testing machine visitors will be able to witness how much pressure is necessary to destroy a heavy timber in the Structural Lab number 5 on your map.

Civil engineers will also be demonstrating the effects of hot water generated by power stations and the environmental pollution resulting with the increased growth of water plants in the Hydraulics Lab number 6.

While it is estimated that there are about 340,000 species of plants found throughout the world, the climate and geographical location of Alberta as every home gardener knows does not make it the world's ideal growing spot.

The Alberta Ecological Survey which studies and identifies and works towards establishing ecological preserves the plants native to Alberta will have displays and talks in Room M-123 in the Biological Sciences Building 15A on your map.

While there are only about 500 groups of plants in 1,605 species native to Alberta, work being done at the Botanical Garden at Devon has shown that many more things will grow here than we might have thought.

In the 15 years the 80-acre garden has been operating more than 3,000 different species of plants have been introduced. While it is now a place of extreme beauty picture 10,000 spring bulbs, 2,500 peonies and 400 varieties of gladiolas -- it is a research station testing the winter hardiness of plants from around the world. The garden's display will be located in the main foyer of the second floor of the Biological Sciences Building Numbers 15A and 15B on your map.

The trop-arctic greenhouses on the sixth floor of the centre wing of Biological Sciences 15 on map provide exactly the kind of research potential that the name implies.

Duplication of the growing conditions whether in the tropics or the arctic allow botanists to study plants normal growth patterns here, thousands of miles from their native home.

The controlled growth chambers in the same area allow scientists to study the effects on plants when their environment changes: how would you behave if your life were reversed and night became day and day became night?

ENERGY, from page 4.

the fourth floor of the Chemical/Mineral Engineering Building 3 on the centre fold map.

An electrical engineering display will feature lasers and their use in providing energy. The use of lasers to generate high temperature ionized gas plasmas will be shown and their application to fusion power generation will be explained. That's in Room EB 458 in the Electrical Engineering Wing building 8 on the map.

The geologists are another group of scientists who make a contribution when it comes to providing fuels for society. They are the people responsible for telling the oil men where to drill and the miners where to dig for coal. University of Alberta geologists have been directly involved in many of the oil and natural gas discoveries in Western Canada.

The geology displays will be in the Agriculture Building 9 on the map on the main floor. The geology museum located in the basement of the building will also be open for open house guests.

Arising out of our society's thirst for oil are a number of problems. Some of them are being investigated by University of Alberta scientists.

Air pollution is one. Two displays being put on by the department of mechanical engineering will deal with aspects of this problem. On the first floor of the Mechanical Engineering Building 4 on the map

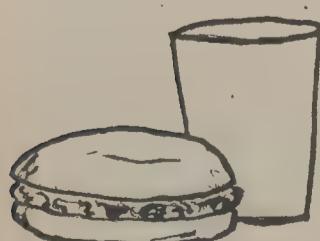
in Room 1-27 a display will show air pollution monitoring of engine exhaust. On the second floor, in Room 2-14, a display is devoted to the problems of air pollution in urban areas.

Oil spills can be a disaster to an environment. Bacteria and fungi are the only organisms that can grow on crude oil and experiments have been carried out by the department of microbiology to see if these microbes can help to clean up oil spilled on land. The treatment of such spills with nitrogen-containing fertilizer results in increased levels of bacterial numbers and a more rapid disappearance of oil from treated plots. This research is featured in the main foyer of the Biological Sciences Building 15 on the map.

The department of botany has a display which presents some aspects of building a gas pipeline from the Arctic through the Boreal forest to Alberta. This will include problems of permafrost and terrain and the role that vegetation plays in constructing a pipeline and in operating a gas field. This display is in room M-149 of the Biological Sciences Building 15 on the map.

Another display in the same area will focus on Alberta's coal, showing the composition, age and distribution of this immense source of energy which is often overlooked by the public.

Where the food is



For the Open House, visitors will be able to sample the average fare of the average student in a cafeteria and a lunchroom that will be open Saturday.

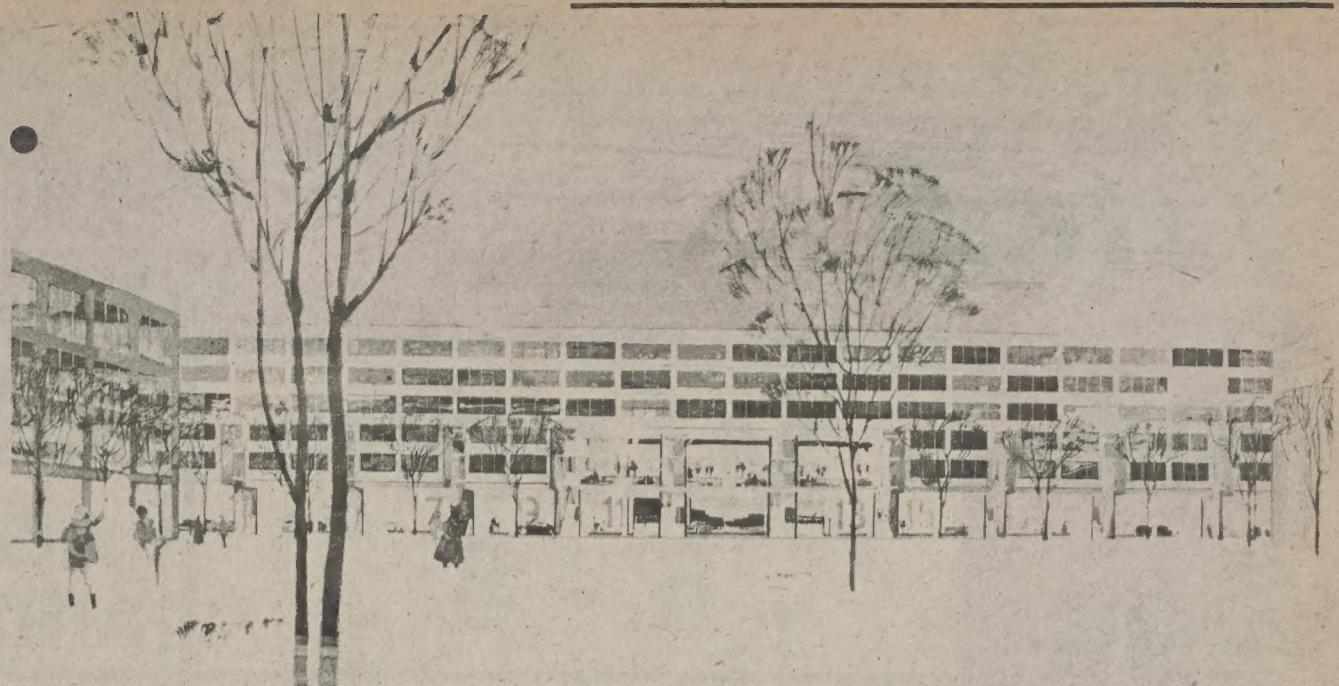
The Central Academic Building CAB, number 10 on the center fold map cafeteria will be open most of the day and is equipped to cater to large amounts of hungry people, so don't be afraid if it looks crowded.

A smaller lunchroom is on the fourth floor of Biological Sciences Centre Wing number 15.

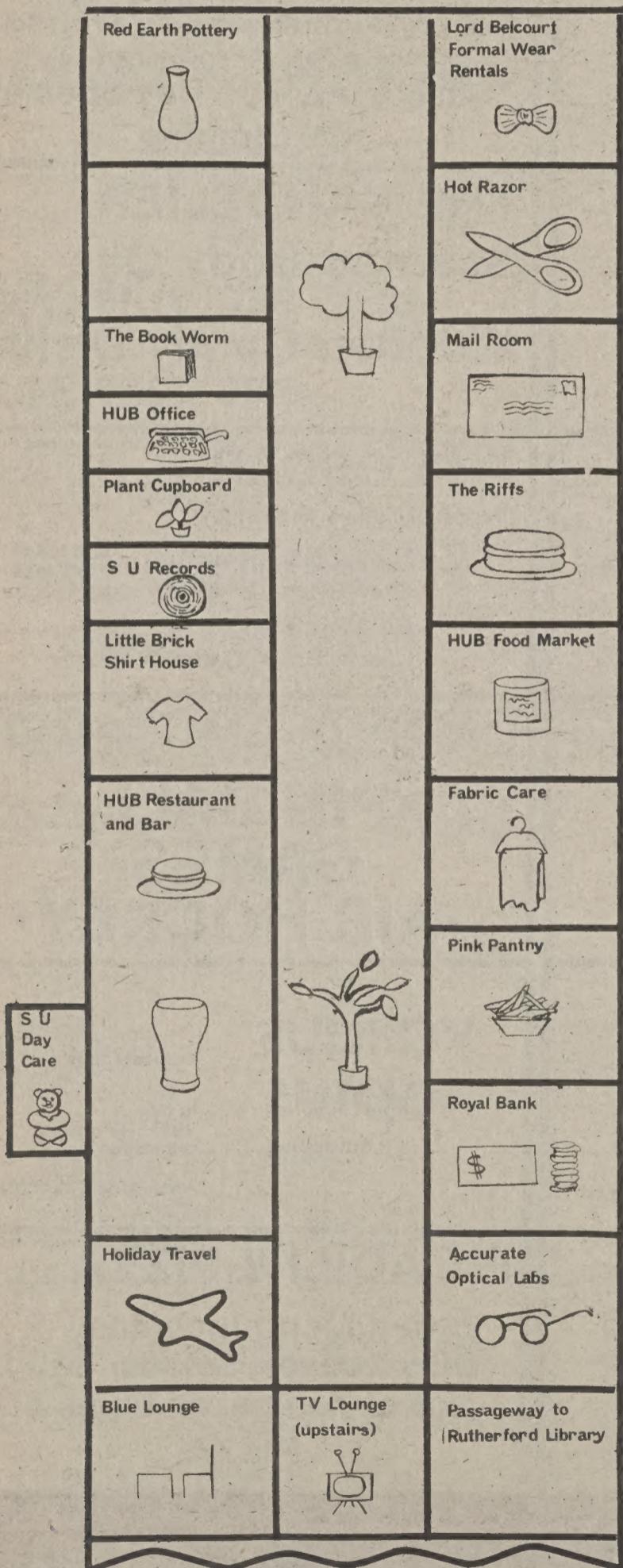
Housing and Food Services people say the best way to find it is to "follow the signs", but don't be discouraged if you can't find it right away: and you might find some interesting displays on the way. Ask the hosts and hostesses at the displays for directions if you get lost. They're there to help.

HUB...

NORTH AMERICA'S MOST UNIQUE SHOPPING MALL

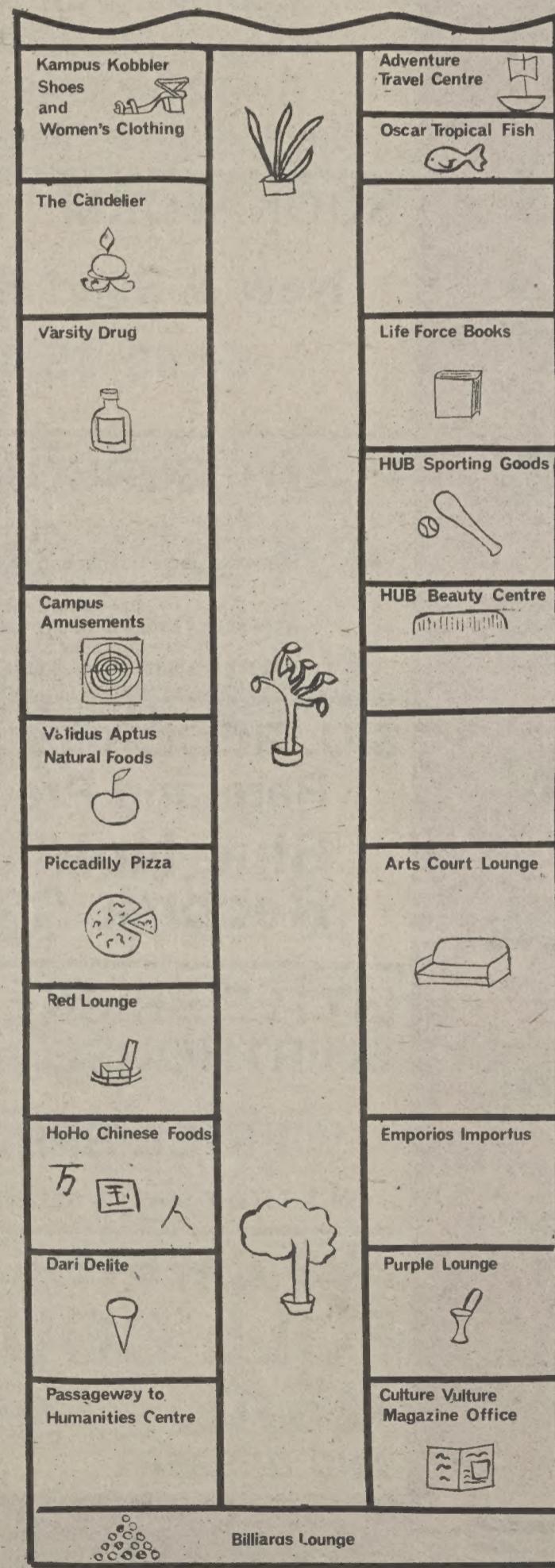


South End



90th Avenue

90th Avenue



North End

ENTER ANY STAIRWELL TO THE SHOPPING MALL

**hub
mall**

OPEN \$49

WELCOME

49¢

49¢

49¢

49¢

49¢

49¢

49¢

49¢

49¢

49¢

49¢

49¢

49¢

49¢

**MARCH
6 - 8**

RED EARTH GALLERY

Earrings 2 for \$3.49

Copper, Pewter Rings

2 for \$3.49

Sterling Silver Rings \$6.49

BOOK WORM

New & Used Books

\$1.49-\$5.49

PLANT CUPBOARD

49¢ SPECIALS

African Violets \$2.49

2½ inch Asst. Tropicals 49¢

S.U. RECORDS

Rare and Precious

Blue Note Jazz

Records \$3.49

**LITTLE BRICK
SHIRTHOUSE**

1/2 PRICE SPECIALS

ON JEANS. T-SHIRTS. SELECTED SHIRTS

**HUB CAFETERIA
FULL COURSE
MEAL AND DESSERT** \$1.49

**HOLIDAY TRAVEL
AGENCY**

**AGENT FOR ALL
AIRLINES-433-2494**

**KAMPUS KOBBLER
SHOES AND CLOTHING**

Buy One Pair of Shoes For Reg. Price, Get A
Second Pair of Handbag for 49¢

* Also many 49¢ Day Specials
on Clothing

THE CANDELIER

Scented Body Oils REG. \$1.49 \$.99

Wooden Candy Dishes REG. \$2.49 \$1.78

THE OSCAR

(Tropical Fish & Supplies)

Multi Color Goldfish - .49

Gravel (5lb. Gab) - 1.49

Goldfish Bowl - 2.49

Upside Down Catfish - 3.49

CAMPUS AMUSEMENT

PIN BALL

GAMES

AIR HOCKEY

**validus
aptus**

foods limited

natural foods

in hub
9013-112 street
edmonton

telephone 433 2298

PICADILLY PIZZA

Varied Menu Includes:
Dilly Loaves, Salads, Soups,
and of course, all types of
PIZZA.

hub mall NORTH AMERICA'S

*Drop Over For a Sandwich & Beverage 49¢
Between 11 & 3, Thurs, Fri, & Sat.*

HOUSE

WELCOME

HOHO CHINESE FOOD
COMBINATION
PLATE \$1.49

DARI DELITE
FANTASTIC
CONES * SHAKES
SUNDAES



RIFF'S BURGERS
UNI BURGER
49¢ with cheese
65¢

HUB FOOD MARKET
BANANAS ² LBS. 49¢
ALL ²⁶ OZ. POP
Plus Deposit 49¢



CLEANERS
&
LAUNDERERS

CERTIFIED MASTER
DRY CLEANER OF SANITONE

PINK PANTRY
SPECIAL MINI SNACK
Chicken (1 piece) with
French Fries 89¢

OPEN 9 - 9
THURS & FRI
10 - 6 SAT

Now -  ROYAL BANK

A Branch of Its Own
Renovated for Better
Service Ph. 439-0041

OPTOMETRISTS
DRS. LeDrew, Rowand, Jones, Rooney, Brin
and associates
CAMPUS OFFICE
HUB MALL 8922-112 ST. 439-5878
SOUTH OFFICE
10903-80 AVE. 433-7305
MAIN OFFICE
12318-JASPER AVE. 488-0944

SUNSHINE SPECIAL
4 WEEK GREECE & TURKEY CAMPING
HOLIDAY \$629 Return From Edmonton
CAMPER RENTALS

 WESTCAN INT'L
"Adventure Travel Centre" 439-1222

HUB DELI
Hot Corned Beef
on Rye
with Beverage \$1.00

LIFEFORCE
BOOKSELLERS
Posters and Plaques
Specially Priced for
49¢ Days

HUB BEAUTY CENTRE
EAR PIERCING
REG. \$15. NOW \$12.49
SURPRISE PACKAGE \$1.49
TOP HAIRSTYLING- Phone 433-0240

MOST UNIQUE SHOPPING MALL

Symphony on the Mall & Travel Flicks

(Music by Department of Music students)

hub
mall

49¢

49¢

49¢

49¢

49¢

49¢

49¢

49¢

49¢

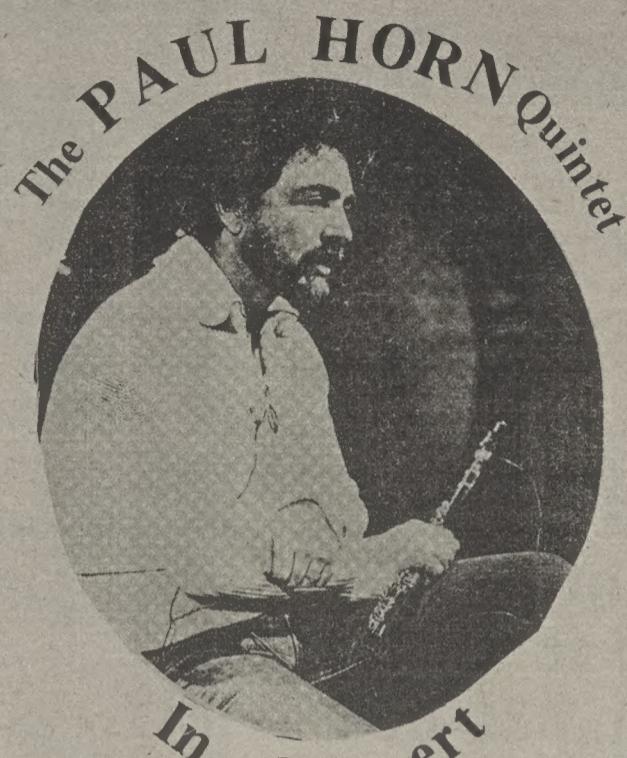
49¢

49¢

49¢

49¢

49¢



In Concert

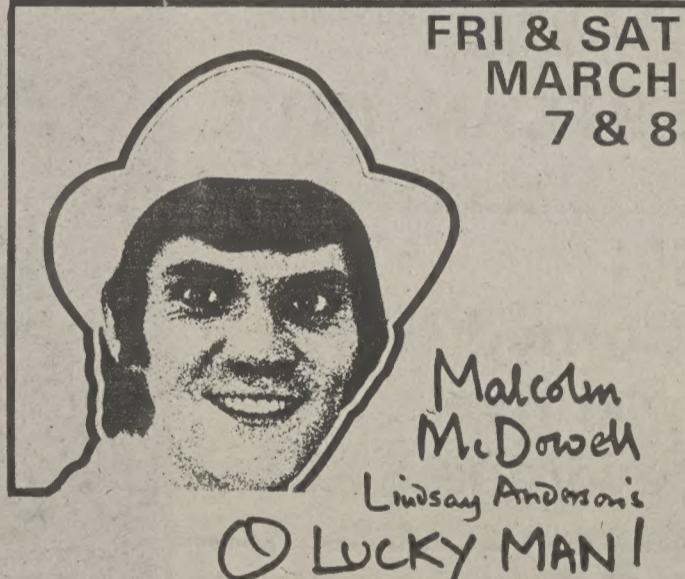
Tickets from \$3.50*
\$3 for SU members
at SUB Box Office

Two Performances
7 & 9:30

MARCH 20

* Available at SUB and at the Door A S.U. Theatre Presentation

Students' Union Cinema



**FRI & SAT
MARCH
7 & 8**

SUNDAY MARCH 9

TRUFFAUT'S  **DAY FOR NIGHT**



TWO SHOWS NIGHTLY SUB THEATRE

DOORS AT 6 & 8:45 FEATURES AT 6:30 & 9:30

ADVANCE TICKETS \$1.00

for SU members at SUB information desk, 9-4 weekdays
\$1.50 at the door

Kampus Kobbler

*Shoes
& Clothing*

*Buy One Pair
of Shoes
For Regular Price
Get Second Pair
or Handbag
up to
Equal Value
For 49¢*

*Shoes
49¢*

*Also -
Many 49¢ Specials
on Clothing*